



psa JOURNAL

VOLUME 17 NUMBER 8

AUGUST 1951

PETER GOWLAND GOES TO THE BEACH

WITH HIS POLAROID
LAND CAMERA



Time and again, Peter Gowland has demonstrated his special talents for making top-notch beach scenes.

And it isn't easy. Sunlight on a bright beach is tricky to handle, and the use of fill-in flash as Gowland has done here doesn't add to the simplicity. But Polaroid pictures-in-a-minute eliminate the guess-work under these conditions . . . and help Gowland select the most effective poses for his models. That's why Peter Gowland is so enthusiastic about his Polaroid Camera.

On the day Gowland made these shots, the sun was bright and high at Paradise Cove, Malibu Beach, California. Most of the pictures were shot at #6 using a No. 5 flash bulb about 6 feet from the subject.

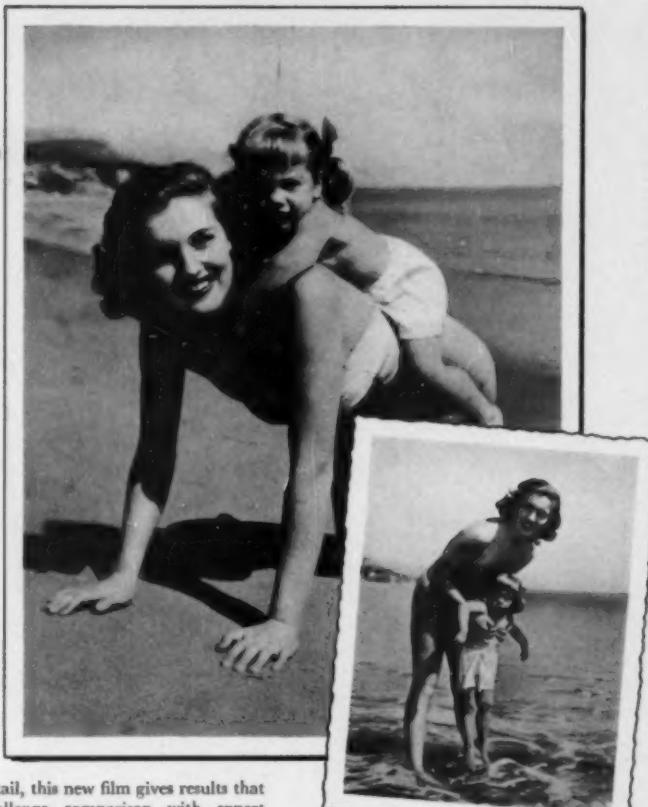
A close look at these Gowland beach scenes reveals some of the important *quality* advances in Type 41 black-and-white Polaroid film. In brilliance of highlights and excellence of shadow

detail, this new film gives results that challenge comparison with expert darkroom production. Contrast may be controlled dramatically by changing the development time. Prints are completely dry the instant they are removed from the camera.

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THIS ISSUE OF PSA JOURNAL IS PUBLISHED IN TWO PARTS

CONTENTS

PART 1

		PAGE
SUMMERTIME	David Teich	Cover
CAMERA CLUBS	H. J. Johnson	478
COLOR		
PATTERNS FOR PRACTICE AND PLEASURE TOO	Karl A. Baumgaertel	486
DESERT PHOTOGRAPHY	M. M. Deaderick	487
FRANK ROY FRAPIRE	Lee A. Ellis	478
GENUS PHOTOGRAPHER	John Erith	495
HOW TO—NO. 19—EXPOSE FILM PROPERLY	Johnny Appleseed	516
PHOTOGRAPHIC FADS, FANCIES & FANTASIES	B. E. Buckley & V. H. Scales	490
PSA CONVENTION		481
TENTATIVE PROGRAM		485
Motion Picture Feature		499
ALONG JUNGLE CAMERA TRAILS	Dick Bird	500
WEDDINGS	Harris B. Tuttle	505
CAMERAMAN—OR GADGETEER?	Frank E. Gunnell	507
WEAKEST LINK—SPLICING	Herbert A. MacDonough	509
COMEDING MOTION PICTURES AND SLIDES	Ira B. Current	511
TITLING HOME MOVIES	Ernst Wildi	513
Stereo	Owen K. Taylor	480

PART 2—PSA NEWS AND COLUMNS

FIRST WESTERN REGIONAL A SMASHER	Winton F. Kelley	(2)17
EXHIBITION LISTING		(2)20
PICTORIAL DIVISION DIGEST	Stella Jenks	(2)21
PSA NATURE DIVISION	Harry F. Reich	(2)27
WHO'S WHO IN NATURE PHOTOGRAPHY	Ruth F. Sage	(2)27
PSA COLOR DIVISION	George F. Johnson	(2)28
DRIVE OF CHAMPIONS		(2)30

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Our new Photo Bulletin No. 72 is out! It shows remarkable photos of Aspen, Colorado, on the occasion of the Aspen Photo Seminar Sept. 26-Oct. 26, which you may wish to attend. If you have not received this bulletin, please write us for your free copy today!

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SOMETHING TO SAY...

RECOGNITION as camera artists has been accorded photographers by New York's Village Art Center. Once each year the Center holds an "open" show. Any photographer may submit any photographs for hanging. After they are hung the jury views the pictures, awarding honors to those regarded as outstanding. Top winner is given opportunity for a one-man show of his prints; other winners for group shows.

PURPOSE of the Center and its open show is to enable photographers who have something to say to say it, photographically. This is the same privilege extended to painters, sculptors, etchers, and other artists by the Center.

QUESTION immediately arises as to whether the average amateur photographer has anything to say through his pictures. True, photography is a language, or a medium of communication. Yet much of the photographic message is emotional. It is something felt rather than said.

TRUE, THE fashion photographer says: "Buy me!" The news photographer makes his report. The propagandist photographer shouts: "Isn't it awful?" or "Isn't it wonderful?" What does the average amateur say?

WELL, MUST a photograph say anything? Must the saying be entirely within the picture? Is it not possible that a photograph actually may say very little, yet trigger a chain reaction of emotional response in the viewer? And not necessarily in the mind of the viewer, but in the heart. Yet even in this way the photograph does say something. If indirectly, it serves the purpose of communication.

PHOTOGRAPHY OWES gratitude to the Village Art Center for pioneering. And also for refusing to tell the photographer what he must say. And, further, for permitting photographs to speak for themselves. VHS

OFFICIAL NOTICE...

A Petition Nomination for Miss Doris Martha Weber, APSA, for PSA Director from the Eastern Time Zone has been received.

Miss Weber is a resident of Cleveland and has served as Eastern Director during the present term. She is an APSA and is active in the portfolios. She is a member of the Pictorial, Color, Technical, Nature, Motion Picture, and Photo-Journalism Divisions and a Cornerstone Member.

JOHN G. MULDER, Pres.

ROBERT H. UNSELD...

As we go to press word is received of the untimely death of Bob Unsel, former Motion Picture Editor of PSA JOURNAL and member of MP Division Executive Committee.

LETTER TO THE EDITOR...

102 Prince's Street
Stockport, England

To THE EDITOR:

Herewith one 'begging letter'—am doing a bit of "research" into Battery Capacitor Units for flash and would like to obtain copies of PSA JOURNAL, Vol. 14, No. 8, August 1948, and PSA JOURNAL, Vol. 13, No. 11, Special Annual Issue, containing the papers by W. H. Fritz and P. A. Marsal. I wondered if any of your readers have any old copies they do not want. Actually am quite willing to pay for same but do not know how the dollar and pound problem works at your end. Will forward any English publications to the same value though. I think that is allowable!

With kindest regards and all best wishes to your Society.

WILLIAM D. HARVEY

Unfortunately, our supply of these numbers is exhausted, so if any reader can help, it would be appreciated. The Editor.

PSA CONVENTION

Detroit, Michigan, October 10-13, 1951

PSA JOURNAL, Vol. 17, Aug. 1951

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Quality is essential in stereo, because third-dimensional pictures — unlike other photography — must be the equal of the original scenes as seen by the eyes. There cannot be any lens defects — in the camera, the viewer,

or the projector — without an unconscious kickback from the eyes. Even with 20/20 vision, a good stereo picture will look bad in a poor viewer. Slightly defective eyes will emphasize minor mechanical defects in stereo slides.

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Fables for Photographers

Once upon a time there was a contest director who read about "pictorial clichés" and to he wasn't sure what it meant, he thought it sounded bad and decided he would correct it in his club.

The thing to do, he decided, was to get judges who had real discernment and had the modern look. So he obtained as judges a newspaper columnist and two others who

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the second preceding month before publication.

Trade—8x10 camera with lens in Packard
shutter for 4x5 Autografex RB box in good
condition. Justin Hartley, Colchester,
Connecticut.

had gained reputations for criticizing the lack of originality in photography.

There was a goodly number of entries for the competition. The first print was placed in the light-box. It was a picture of the Matterhorn, awe-inspiring in its snowy majesty, with a sunburst thru the clouds above it and a rainbow in the valley to the side. "Out," said one of the judges, "that mountain has been there a million years. Such an old subject is passé and there should be no encouragement to those who do not have enough originality to photograph something new."

The next picture was of a rose-breasted grosbeak feeding its young in their nest. "Out," said the second judge, "with world shaking events going on around us, there should be a greater social consciousness among photographers than this waste of effort with birds and flowers."

Then a picture of a dignified gentleman, serene in old age, with the character of many years of firm righteousness in the lines of his face. "Out," said the third judge, "how unoriginal. At least, an egg could have been suspended near his left ear."

And so it went, with architectural studies, still-lifes, texture, etc., and finally the last picture was thru the easel and none had been accepted.

The contest chairman was disappointed. "We'll have no exhibition of our own," he announced to the audience, "but we shall have the opportunity to see samples of the work of our judges because I asked them to bring such samples for our edification."

Upon the easel he placed a print by one of the judges. It was a picture of a little boy with a bare bottom running for the Chic Sale. The print by the second judge was a water lily, while that by the third judge was a sunset.

Moral: Originality is as originality does, and not as the mouth goes.

FRANK ROY FRAPRIE

LEE A. ELLIS, APSA

Frank Roy Fraprie, 76, Hon.FPSA, Hon. FRPS, passed away at his home in Brighton, Mass., on June 20, 1951. Writer, editor, photographer, and dean of photographic exhibitors, Frank Fraprie has been, for over half a century, the world's foremost figure in the field of Pictorial Photography. Widely known throughout the world both personally and as the Editor and Publisher of "The American Annual of Photography," the monthly magazine *American Photography*, and many hundreds of book titles, Mr. Fraprie's influence on photography in general and pictorial photography in particular was tremendous, exceeding that of any other person or organization. This influence was exerted partly through the medium of the "Who's Who" listings in the "American Annual" and through that publication's accrediting or non-accrediting of photographic exhibitions throughout the world. Mr. Fraprie's administration of the world's salon activities earned for him the deepest admiration and respect of photographers and photographic organizations everywhere. In the

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KUTZTOWN PENNSYLVANIA

polices and decisions of "The American Annual." Mr. Fraprie was at once just and firm, without ever losing sight of the personal aspect of the exhibitors' efforts. He died in 1949. He is survived by his wife, Marjorie R. (Purchase) Fraprie.

While he knew all of the Photo Secessionists personally, Mr. Fraprie's stand was on the other side of the fence. He stood for clarity, simplicity, and pure photography. His writings and photographs expressed and sponsored this approach and while the Secessionists subordinated photographic quality with soft focus lenses and other devices in favor of expression of mood, he retained, through a thorough knowledge of the medium, the photographic quality which we take for granted today. He always had an instinctive sense of line and rhythm and an inclination to use unusual camera angles. A small high-key 4x5 platinum print "Seven Pines" won for him the Pictorial Medal of the Royal Photographic Society in an exhibition in 1907 where every other print was 16x20, 20x24, or larger. The Fellowship of this Society was awarded him in 1906 and since then he won medals and honors from almost every important photographic society in the world, and went on to attain the highest goals of the pictorial photographer.

Mr. Fraprie was a Charter Member of PSA and active in the formation of the Society. He has held many positions and one of his last acts was the donation of a number of superb prints to PSA. Before his illness he missed few PSA Conventions.

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STEREO

OWEN K. TAYLOR

Believe it or not, you can become a first class stereographer in one easy lesson. And this is true for button pushing beginners as well as more advanced workers with one-eyed cameras. Two-eyed photography—stereo with the modern miniature stereo camera—is in my opinion too easy for the beginner. The early results are so thrilling that one soon makes demands upon the fixed inter-lens cameras which are beyond the facilities of the camera design. It is when the beginner tries for close-ups, photomacographs and photomicrographs in stereo that disappointments occur. You are apt also to run into problems when your principal center of interest is in the far away distance.

In the past four columns, the first of which appeared in the April issue, we have suggested sources of reading in the art of stereo and have outlined briefly some of the basic principles for the beginner. This month we shall consider means of getting better stereograms which should stand up well in competitions which have been scheduled for the fall.

Stereo Is Different

Stereo photography requires a different approach in the technique of taking and composing than that used making straight two-dimensional flat pictures. Many principles which guide us in one-eyed photography must be set aside when we make stereograms. In order to know what and how to produce first class stereograms of prize winning calibre, we must first consider the standards by which they will be judged. The Stereo Society of America, a member of PSA, has since March been working with a committee of experts in stereo in an effort to set up rules for a series of nationwide monthly competitions they will sponsor, which will culminate in an open international competition to be held in May 1952.

In order to arrive at a basis for judging, this committee has been checking thousands of stereo slides which have come for processing and mounting to one of the mounting services in the vicinity of New York. A number of members of the Stereo Society have established such mounting services and the committee plans to visit all nearby ones before finally fixing the rules for the fall competitions. The

committee started at the plant of the Stereo Mounting Service because they were the first to set up professionally for the job and because they do a great amount of that type of work for a variety of amateur and professional stereo photographers.

Tentative Values for Judging

The vast majority of the thousands of slides examined have been travel shots taken both here and abroad. There are many outdoor portraits, many attempts at pictorialism and a relatively few indoor portraits and still lifes, some taken with flash, others with photofoots. Professional shots have been made with complete complements of spots and floods and some have been outstanding as examples of good stereo.

After weeks of examining slides the Stereo Society decided upon a policy of having five judges, each one to be assigned to judge only one of five different factors which go to make up a really good slide. Subject to further tests over the next few weeks before the application blanks are printed for the contests, the Stereo Society has tentatively agreed upon the following values and standards:

1—Stereo quality	value	20	Points
2—Composition (Stereo)	"	10	"
3—Color Harmony	"	10	"
4—Definition	"	5	"
5—Exposure	"	5	"

Thus a stereogram if perfect in every respect would have a maximum value of 50 points if each of the five judges rated it the highest value he could give in his respective category. If one had a pair of perfect color slides mounted as a stereo pair but not taken as stereo with different perspectives, he could then be awarded only a possible top maximum value of 30 points. In category 3, Color Harmony, it was decided that a good black and white stereogram possessing good highlights and luminous shadows with a full scale of halftones would rate the full 10 points assigned for color harmony. Thus both color and black and white slides will have equal opportunities in the competition. The rating for three-dimensional quality was placed high so as to lower the value of good slides which did not possess full potential stereo quality.

Stereo Quality

The first essential for stereo work is for slides to have three-dimensional quality in all nearby and distant planes. This means that there must be separation apparent beginning with the nearest foreground subject matter on through the middle distance and then on to the most distant planes visible. In outdoor shots it is not easy to achieve the results which would rate the full 20 points. The best run of the mill slides tested were valued tops at 17 or 18. Many rate very low. For instance, a shot made from the deck rail of a ship out over a wide expanse of open water with another ship on the horizon and nothing in between would possess no

stereo, unless a choppy sea created high waves in the immediate vicinity of the foreground. There are many other situations where good subject matter in the distance with no foreground object would have little if any stereo.

Foreground and middle distance material all in good sharp focus taken from a slightly elevated camera position would possess a maximum of three dimensional quality if there was clear differentiation between the rear of the middle distance and the matter at the infinity point. This type of slide would rate the full 20 points.

Composition

Good composition in stereo means the selection of viewpoint which arranges foreground matter in relation to middle distance matter so as to enhance stereo and serve additionally as a strong lead-in.

As an example, take a strong leading line such as a fence in perspective leading on to some object in the middle distance. In flat photography that fence is best placed either at or near to the left or right edge. In stereo a strong line of that character is best when placed just off the center either right or left. At that point it aids in creating both nearby and distant separation of planes.

Color Harmony

A plan was agreed upon for judging color harmony which would include both color shots and black and whites. The big point in making color shots is to remember that the extra exposure needed to bring out good quality in foreground subject matter usually tends to burn out—overexpose—your sky areas. Watch out for that. Watch out too for burning out light pastel colors such as the blue of the little forget-me-nots. Exaggerated and violently clashing color combinations will rate very low while harmonious combinations and slides having unity of tone will rate high.

Definition

In stereo best effects are obtained when everything visible in the slide is in critical sharp focus. You will rarely if ever leave your focus arrow at the infinity point. You will, if you want to rate the full value for definition, use the depth of focus scale and the lens stop that will give you the entire picture in sharp focus.

Be sure in any event that the material nearest to your camera is sharp. That framing tree which in flat photography need not be critically sharp must in stereo be sharp or the two out of focus images will create eyestrain when your slide is viewed or projected. Out of focus foreground material tends to pull attention to the out of focus matter and away from your center of interest.

Exposure

Of course, here we mean use a light meter and not art for art's sake.

That's all for this month. Think the above over carefully, then let us hear from you with suggestions.

PSA CONVENTION

October 10-13, 1951

LOAD YOUR FILM

COCK YOUR SHUTTER

AND HEAD FOR DETROIT!

FOR THE BIGGEST PHOTOGRAPHIC CONVENTION IN PSA HISTORY



DETROIT WATERFRONT FROM AMBASSADOR BRIDGE which joins Detroit and Windsor, by J. Elwood Armstrong, APSA. This is just a sample of the fine pictures you can get Wednesday, Oct. 10, 1951, when the PSA Convention goes "South of the Border to Canada" across the Ambassador Bridge for the big get-together on the Canadian shore. Be sure to come early so you won't miss this big party.

ALL CAMERAS POINT TO DETROIT

THE Book-Cadillac Hotel will be teeming with photographic talent October 10-13, 1951. Whatever your interest in photography, there will be a program to suit your taste every hour of the Convention. All six divisions of PSA have signed up the very tops in their fields. Emphasis is being placed this year on combined clinic programs, where you may ask questions and get answers from experts in every phase of photography as well as headline demonstrations and lectures.

Detroit will abound in picture-taking opportunities. Right at the Book-Cadillac Hotel itself will be a "picture booth" where you can pose with your best girl in a replica of an old-fashioned automobile against a backdrop of Detroit's terrific skyline. Dusters, goggles, and caps will be available for "local color." These pictures will be lots of fun to show the folks back home when you return from the Convention.

The big Field Trip—rain or shine—to world famous Greenfield Village offers picture possibilities to the serious salon exhibitor and to the snapshot shooter alike. Exact copies of famous early American buildings, rare museum pieces, gorgeous autumn trees in rich reds and yellows—a veritable photographers' paradise. So fascinating even "darkroom widows" will want to come along.

Big, Blue and Glossy

This unique demonstration put on by the "Royal Fam-

ily" of the Photo Guild of Detroit will satisfy the curiosity of many exhibitors.

They will explain, without omitting any of the steps, how everyone can make those distinctive big, blue and glossy prints that hit the judges right in the eyes. They will start in with the reason for making glossy prints, through picture ideas, exposing, developing, toning, ferrotyping, finishing and presentation of final print.

The "Royal Family" of the Photo Guild is composed of five men—all seasoned exhibitors—all experienced speakers with a friendly, lucid style. You will enjoy their good-natured ribbing of each other as they demonstrate exactly how they employ the technique that made the Photo Guild famous. They are:

Earle W. Brown, APSA, Associate of the Wilmington and Montreal Salons. Four star exhibitor, the second man to win a 200 point diamond pin in Photo Guild Competition, member of five portfolios, past president of the Guild. Interested in landscape, architecture, childrens pictures and color slides.

J. Elwood Armstrong, APSA, BCS, CPA, also past president of the Photo Guild and the first man to ever win a 200 point diamond pin in Guild Competition. Author, teacher, lecturer, four star exhibitor, past president of the Detroit International Salon Society, representative of Pictorial Division for State of Michigan. His special interests are marine scenes, architecture—both in black and white and color, and teaching others the fine tech-



MRS. OLGA IRISH, APSA, (Left) who will be featured at the Detroit PSA Convention. "Portraits of People Like You and Me" will be the title of her demonstration. Mrs. Irish is especially well known in the East. Salon exhibitor, judge, lecturer—her honors are many and the list is long—so the best advice we can give you is come to Detroit and see this remarkable personality for yourself. RODGER J. ROSS (Right) who will give you the "know-how" on how to make accurate duplication of color slides with his process of three narrow band filters. He will demonstrate results with slides and answer questions.

niques of photography. Salon judge of note and director of the national activities of the Photo Guild of Detroit.

Lyall F. Cross, General Convention Chairman, ten years an ardent worker in both color and black and white. Versatile worker from abstract to portraiture. Past president of the Guild, print director for several years, lecturer and demonstrator.

LaVerne L. Bovair, president of the Photo Guild of Detroit, table top specialist, student of Mike Roll. A man with a keen sense of humor and a voice you can hear to the very back rows. Consistent winner in the Guild's annual "Screw Ball" show. Lecturer and judge—he will explain those little details that go to make a top-notch print.

Victor A. Lookanoff, in photography on and off for 20 years. Wins more prize money with his "big, blue and glossies" than any other member of the Photo Guild. Salon exhibitor, traveler, expert in getting those pictures with "eye appeal."

This program will consist of a series of actual demonstrations on the stage of all the steps in making these famous salon prints. And they also

promise a few surprises too—you'll learn a lot, but this program will be far from dull.

Photography Comes of Age

This is the latest program scheduled by the Technical Division, for Friday evening at 7:30 PM. Mr. William F. Swann, of Kodak, will be chairman and he promises a top-flight program with much appeal to all.

Industrial Photography

Not since 1948 has such a program been presented at a PSA Convention. Topics to be covered include "Planning and Preparation of Industrial Visual Aids," "Photomplate Photography," "Micro-filming in Industry," "High Speed Motion Pictures in Industry," "Some Specific Applications of Photography in Industry," and "Making Pictures Within the Plant." All of these topics will be discussed from the viewpoint of their uses and advantages in photographic operations and functions in industry today. Each expert will present a short resume of his topic and then answer questions from the audience. This should be one of the highlights of the Convention. Be sure to attend!

Features Plus

H. Clyde Carlton, APSA, will be moderator of the Color Clinic. This program will be one of the most popular at the Convention for color is of interest to an increasing number of camera fans. Bring your questions to the following experts who will assist Mr. Carlton: Harold Harsh of Ansco, Harry Lerner of Tricorn Press, Howard Colton of Eastman Kodak Co., and Maurice C. LaClair, color photographer extraordinary.

Walter J. Pietschmann, flash photography authority, action photographer, lecturer, teacher will be on the Convention program to analyze small prints. This program will be of great help to the vast majority of camera fans who do not go in for exhibiting of big 16 x 20 prints. Mr. Pietschmann is a speaker with a fine, concise delivery and a keen eye to spot things in prints which can be improved—and what's more he can tell you the remedy for most of your print troubles. Secretary of the Photo Guild and Secretary of the Detroit Convention Committee. Look for this program when you come to Detroit.

Stereo—a new program for this newest photographic medium which is gaining in popularity every day. Details later.

South of the Border to Canada—our Canadian friends are going all out in preparations for this big gala opening affair for the Convention. Food, music, entertainment, picture taking, talking with other camera fans. Enjoy this international program and get acquainted early with the other PSAers so you will feel like you are among old friends right from the first day of the Convention.

Annual Banquet—There is a big surprise in store for this Saturday night of the Detroit Convention. If what the "powers that be" whisper to us is true, the speaker for the banquet will be one of the most dynamic, terrific personalities in photography today. It promises to be the thrill of a lifetime. So plan to attend the banquet!

More big names on the Color and Technical Divisions program—John

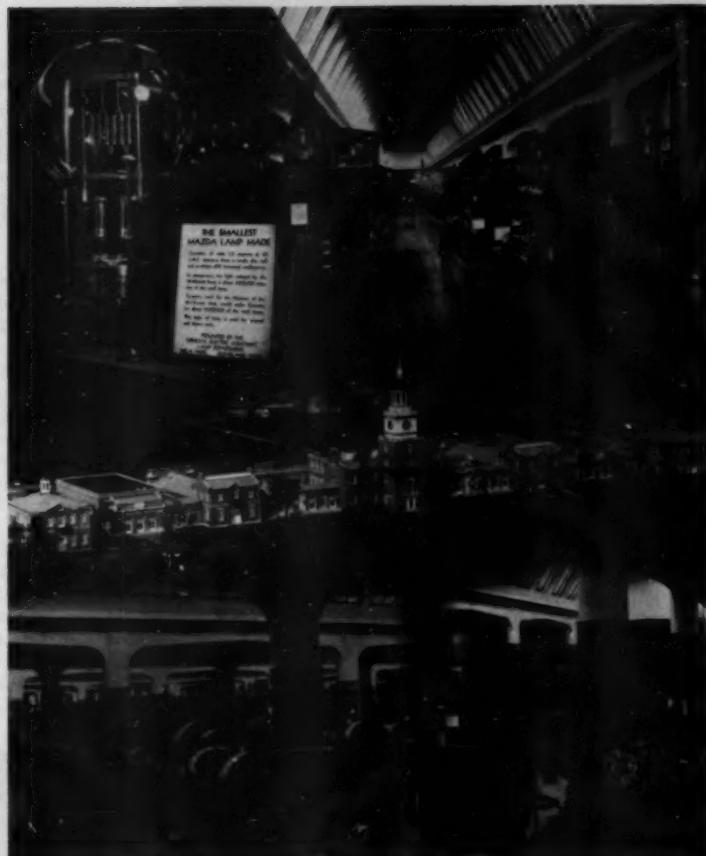
B. Taylor with "Technique for Evaluating Color Reproduction with Color Negative Monopacks;" E. F. Berley and J. E. Bates on "Sensitometric Processing of Color Film with Rotary Agitation;" Philip M. Mikoda with a paper on "Color Duplicating Made Easy."

Comprehensive Print Analysis—put on by J. Elwood Armstrong, APSA, head of the PSA's popular Personal Print Analysis Service. This program is of special interest to PSA members because it presents a different approach to print analysis. Mr. Armstrong will select prints for discussion having many defects and compare them with similar prints in which the defects have been corrected or overcome. The prints will be divided into classifications such as Portraits, Character Studies, Landscapes, City Scenes, Marines, Seascapes, Patterns, Still Life, Table Tops, etc. Mr. Armstrong is a seasoned salon judge, teacher, and a master at photographic technique. This program will be of immense value to every photographer and will also present a guide for valuable club programs.

Yousuf Karsh, FPSA—Convention headliner! Be sure to see this dynamic personality who creates such remarkable photographs. Never before in the history of photography has one photographer gained such a universal reputation for outstanding portraits. This is an opportunity you can't afford to miss. Come to Detroit, October 10-13, 1951.

Badges are Bigger—no squinting this year to read "whosis" name from "whatsis" whose face you recognize but can't recall the name. Badges for the 1951 Detroit Convention will be large and written in large, bold face, black letters.

Photo Guides—the Detroit Photo Guild has more ardent salon photographers than most camera clubs. These friendly folks will be on hand to guide you to picture-taking places in and about Detroit—marines, boats, industrial, architecture, story telling, character shots, landscapes, patterns—practically any subject matter you can name—black and white or color—day or night—just make your



A photo montage showing the exterior and portions of the interior of The Edison Institute Museum, Dearborn, Michigan, which will be included in the Thursday field trip. (Upper Left) The largest and smallest Mazda Lamps ever produced by the Lamp Division of the General Electric Company. The large Mazda light will actually operate but was never manufactured commercially. The small Mazda lamp is on top of the pedestal to the left of the placard. (Upper Right) These locomotives are part of the transportation section. The locomotive on the right is a part of the famous Rocket. Across the aisle is a French locomotive used by the French in their attempts to construct a canal across the Isthmus of Panama. (Center) This photograph was taken in the early part of the 1930's and shows the immense size of The Edison Institute Museum. The floor space in the Main Exhibition Hall covers over eight acres. (Lower Left) A sectional view of the Steam Power Section of the Museum. (Lower Right) A portion of the household arts exhibits featuring large spinning wheels used for the spinning of wool yarns many years ago.

wants known at the registration desk and get expert advice from the natives on the best picture places in Detroit.

Detroit in Party Dress

Already the huge colorful pylons line Washington Boulevard right in front of the Book-Cadillac Hotel—Convention Headquarters—as Detroit decks herself out in her 250th Birth-

day finery. A wonderful picture opportunity for 1951 PSA Convention goers that will never happen another year. Grand Circus Park (only four blocks from the headquarters hotel) has in its center a huge birthday cake several times larger and taller than the average house. Plan your vacation now—or at least part of it—and come to Detroit for this once in a lifetime 250th Birthday Festival.



Part of the Hurd Expedition.

Special Treats for Shoppers

Detroit stores within walking distance of the Book Cadillac Hotel are featuring special merchandise for this birthday celebration year as well as their usual fine selections. Give your "darkroom widow" a real treat. Bring her to Detroit with you for the Convention and turn her loose in the many fine stores in Detroit to do her fall shopping. She will think you are the most

wonderful man in the world—and when you see her in her new Detroit hat and dress, you'll fall in love with her all over again.

Advance Registrations—already registrations have come in from as far away as Texas. Be an early bird. Fill in the advance registration blank at the front of this issue of *PSA JOURNAL* and come to Detroit. Remember *It's Detroit for Fun in '51!*

Karambi To Be Shown

When Ed. Hurd and his son, Edwin W., were trekking through the lush tangles and the scorching velds of East Africa in search of Big Game recently, they made a fine photographic record of the gigantic jaunt.

Result: a highly-colorful, 16mm Kodachrome, moving picture, titled "Karambi," with narration by Milton J. Cross, famed American Broadcasting Company luminary, and a fine musical background of classical and semi-classical selections. Script, story and management are by Richard B. Smith and J. R. Worthington, of Birmingham, Michigan. The Hurds were assisted in photography by Syd R. Coulson, of Nairobi, Kenya Colony, British East Africa. This film will be one of the highlights of the PSA Detroit Convention in October, and shows the very cream of over 10,000 feet of 16mm Kodachrome shot on the three month's safari.

See all of the safari's experiences, both pleasant and otherwise, as well as close-ups of all types of African



W. H. SAVARY (Left), nationally known nature photographer, famous for his bird color slides, will explain the fine points of photographing our feathered friends at the 1951 PSA Convention. Learn the short cuts from this expert so next time you "shoot" birds you will be able to come home with some prize winning slides. MAURICE CARNES LACLAIRE (Center), known as the "Grand Rapids Rembrandt" because his beautiful color portraits are made in the style of the old masters and he lives in Grand Rapids, Mich. He says, "Color Photography is new, it is in its infancy and portraiture is one of its most complex and exacting phases. Color gives to photographic portraiture all the fine, traditionally good means of expression. The famous works of the old masters are now a means of expression in photography formally limited to tones of gray. I seriously believe that in the years ahead we will prove that with color we can rival in rendition of tone, composition and certainly with more exactness, the work of the most famous artists of the brush." Mr. LaClaire will demonstrate lightings and show 16x20 direct color prints of indoor, garden and pictorial portraiture. FRED BOND (Right), one of the top persons in color photography to be featured at PSA Convention in Detroit. A dynamic, interesting personality, Fred Bond is sure to delight you with his program on color He has the answers to those unusual problems that so often crop up unexpectedly while shooting outdoors.

game in natural color with emphasis on elephants, lions, rhinos, and, of course, the famous African Cape buffalos.

Learn of the problems of such a photographic venture. All cameras and equipment were kept in waterproof, cork-lined, air-tight, aluminum-painted containers especially constructed. Silica gel was used as a drying agent to protect cameras and film. All in all including personal equipment, also specially packed, 2,000 pounds of equipment had to be transported.

The Hurds, father and son, of the Hurd Lock & Manufacturing Co. in Detroit, undertook this trip as a vacation because of their interest in hunting and travel. They were accompanied by Harry Selby, the White Hunter with the firm of Ker & Downey of Nairobi, British East Africa on the Equator. Be sure to see this outstanding production when you come to Detroit. Bring the children—they will love it.



A Scene from Karambi.

Tentative Program, PSA Convention, October 10-13

Wednesday, October 10

9:30-11:45 AM—Registration, Book Cadillac Hotel
9:30-10:30 AM—PSA Board of Directors Meeting, Parlor H
9:30-11:45 AM—TD—George T. Eaton, APSA, Eastman Kodak Co., "Symposium on Industrial Photography"
1:30- 3:00 PM—General Membership and National Council Meeting
1:30- 3:00 PM—TD—George T. Eaton, APSA, Eastman Kodak Co., "Symposium on Industrial Photography"
3:15- 7:00 PM—Barbecue, South of the Border to Canada
7:30- 8:30 PM—Progress Medal Award & Official PSA Exhibition Opening at Detroit Institute of Arts
8:30-10:00 PM—Movies, Color and Nature Slide Exhibit—Showing of Technical Slides at Detroit Institute of Arts

Thursday, October 11

9:30-10:30 AM—CD, ND—W. H. Savary, "Long Focal Length Lens Problems, Bird Photography"
—MPD—Executive Committee Meeting
—PD—Mrs. Olga Emma Irish, APSA, "Portrait of People Like You and Me"
—P-JD, TD—Ford Motor Plant Tour
10:45-11:45 AM—CD—Stereo Demonstration, David White Co.
—MPD—Showing of Amateur Movies
—PD—Print Analysis by Experts
—P-JD, TD—Edward S. Purrrington, Ford Motor Co., "Photography in Industry"

1:30- 5:00 PM—Field Trip to Greenfield Village

7:30- 8:30 PM—MPD, For All Divisions, E. J. Hurd, "Karambi"
8:30-10:00 PM—CD, For All Divisions, Fred Bond, "Color Composition"

Friday, October 12

7:30 AM—Council Breakfast
9:30-11:45 AM—Johnny Appleseed, All Divisions—Grand Ballroom
11:45- 1:15 PM—CD, TD Luncheons
1:30- 3:00 PM—CD, TD—Papers on Color Photography
—MPD—Equipment and Pre-Planning Clinic

—PD—Photographic Guild of Detroit, "Big Blue and Glossy"
—P-JD—News and Magazine Photography

3:15- 5:00 PM—CD, TD—Color Clinic
—MPD—Shooting Your Movies Clinic
—PD—Maurice Tabard, "Creative Photography"
—P-JD—Michigan State Police, "Crime Laboratory"
6:00 PM—MPD—Banquet

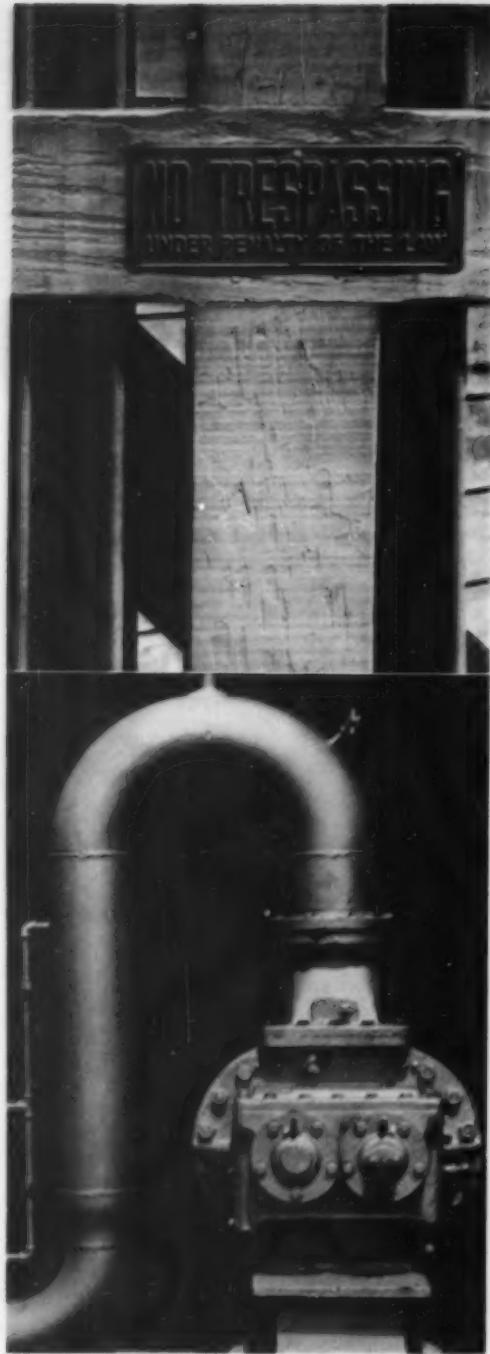
7:30- 8:30 PM—TD, For All Divisions, "Photography Comes of Age"
8:30-10:00 PM—PD, For All Divisions, Yousuf Karsh, FPSA

Saturday, October 13

9:30-10:30 AM—CD—Color Slide Salon Showing
—MPD—Errors in Movie Clinic
—PD—Miss Doris M. Weber, APSA, "Commentators Conference"
9:30-11:45 AM—ND—Nature Slide Salon Showing
—TD—Technical Papers
10:45-11:45 AM—CD—Mrs. Helen C. Manzer, APSA, "Unbelievable Utah"
—MPD—Editing and Titles Clinic
—PD—General Meeting, Dr. C. F. Cochran—Recorded Lectures
—P-JD—Common Errors of Subject Handling and the Remedies
11:45- 1:15 PM—ND—Luncheon
—PD—Directors Luncheon

1:30- 3:00 PM—CD, TD—Rodger J. Ross, "Duplication of Color Transparency by Three Narrow Band Filters"
—MPD—Ray Eggerstad, "Down the Mighty Colorado"
—Clinic on Sound Motion Pictures
—PD—Miss Doris M. Weber, APSA, "Small Print Judging"
—P-JD—TV and News Coverage
3:15- 5:00 PM—CD, PD—Maurice LaClair, "Lighting for Color Portraits"
—MPD—Amateur Movies
—TD—Technical Papers

7:30-10:00 PM—Annual Banquet, Grand Ballroom



Patterns for Practice And Pleasure Too

WORDS AND PICTURES BY KARL A. BAUMGAERTEL, APSA

WHILE most beginners and less experienced workers do not appreciate the esthetic value of pattern pictures, they should at least try making them as they are valuable as a means of learning composition and of developing the "seeing eye" necessary to really good photography. As examples let us present:

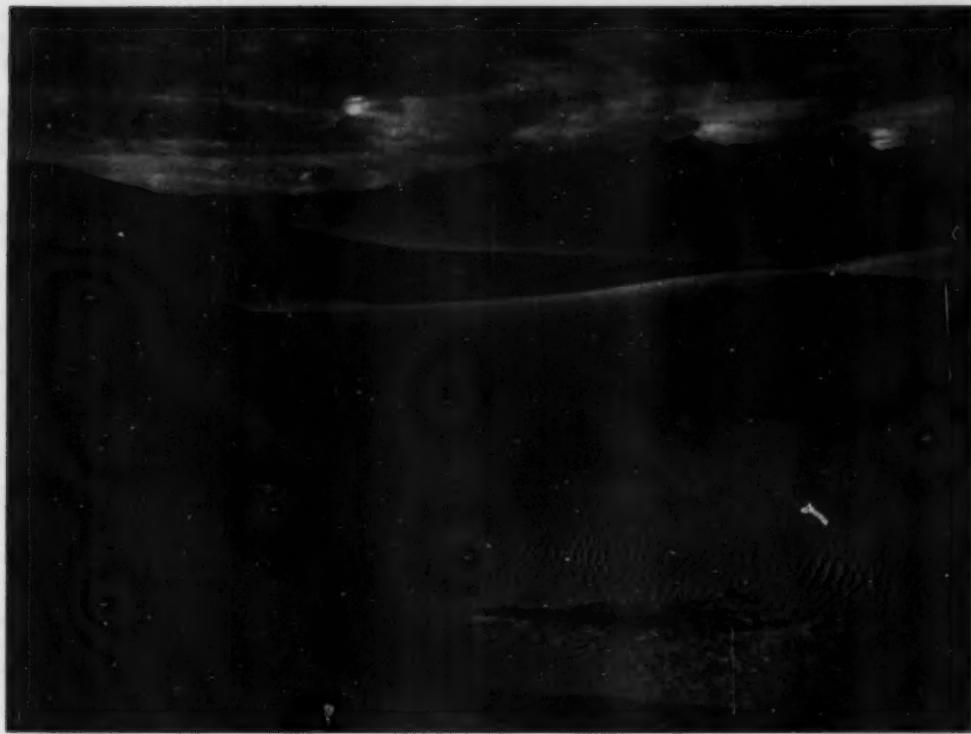
"No Trespassing" (Upper left). An interesting play of vertical and horizontal lines and shapes with an accent in a strong position in the picture area. Note particularly how the heavy diagonal shadow in the lower left supports the whole composition and prevents the possibility of unrelieved verticals and horizontals from becoming monotonous.

"Industrial Pattern" (Lower left). Mostly curves and circular shapes with contrasting straight lines and rectangles where they are most effective. The extreme simplicity of all of these pictures is an important factor in their success.

"No! No!" (Below). Just two signs on the side of a building but still an interesting picture. Here the contrasting shapes and lines are important. Correct placement of the units was imperative. The horizontal lines tie the whole thing together.

Now that you have read the comments and have looked at the pictures you will probably say, "anyone can make pictures like that." Patterns are plentiful and available anywhere but making good pictures of them is something else. Try it and you will find out why they are good practice.





LATE AFTERNOON

M. M. Deaderick, APSA

Desert Photography

M. M. Deaderick, APSA

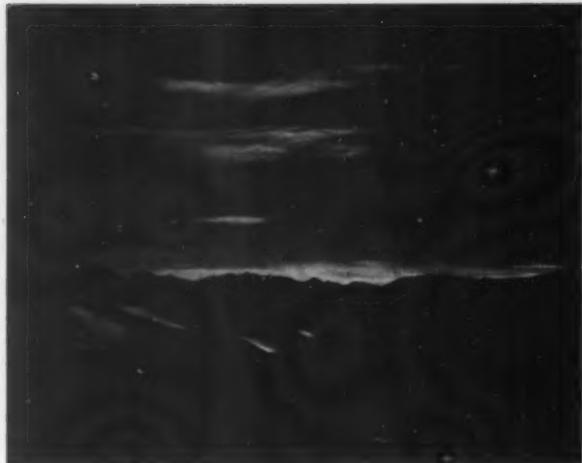
DURING the years of the early thirties I was engaged in construction work in the Colorado River country, in the southeastern portion of the State of California. It was there that I was introduced to vast barren regions, and became aware of the stark beauty to be found in the desert.

When, some years later, I became interested in photography as a medium of pictorial expression, it perhaps was natural that I gravitated to the desert scenes, still vivid in my memory, as my favorite subject matter.

Thus launched on a specialism which has continued to intrigue me, it became my ambition to explore Death Valley, and to depict the grandeur that one learns to see

in such awe-inspiring desolation. Death Valley is an arid region some 100 miles in length and 10 to 20 miles wide, located in the eastern, central part of California, near the Nevada border. It may be reached and traversed by several access-highways.

The uninitiate probably would think of desert scenery in terms of a monotonous sameness. This, however, is not the case. The desert responds, even as more conventional landscapes, to changing weather conditions, the various lighting effects present at different times of the day, and the varied aspects at different seasons of the year. And unlike most landscapes, the very topography changes with the restless shifting of the sand.



DEATH VALLEY SCENE



GATE ORNAMENTS

In most fields of photography, the best results, insofar as modeling and texture are concerned, are obtained by side or back lighting from a relatively low-angle source. Desert photography is no exception to this general rule.

I have found, from experience, that in photographing deserts and sand dunes the best effects are present shortly after sunrise, and again, shortly before sunset. And in Death Valley, the best relationship of the sun to the terrain, for pictorial results, is in the Spring and Fall. During these seasons, too, not only is the air freer of dust particles, but also the temperatures are more conducive to comfortable travel into the desert.

"Death Valley Dunes" illustrates the results obtained when photographing this subject matter in midmorning, when the sun is rather high in the sky. Although not unpleasing, the modeling and texture are not so pronounced, nor is the effect as dramatic as would have been the case in the early morning or late afternoon, as exemplified by the accompanying illustrations—"Death Valley Scene" and "Late Afternoon."

While many excellent pictures are made as the result of fortuitous circumstances alone, there is usually no substitute for the ingredient—planning—in the recipe for pictorial success.

It is my preferred practice to determine, in advance, the makeup of the proposed picture. To accomplish this, I hike into the dunes until I find a promising location. There, I study the shape of the mounds, the sweeps of sand which may be used as leading lines, and any bushes or shrubs which may act as compositional balances or accent points. There, too, I study the probable position of the sun at its rising and setting, to determine the best time for making the picture.

Having decided, in advance, where and when the picture is to be made, I endeavor to be "on location" and ready when the proper time arrives. This is especially important when it is realized that in the early morning and late afternoon only about 30 minutes are available for making negatives when the highlights and long shadows are at their best.

Since desert photography, more frequently than not, involves hiking into the countryside away from the highway, it becomes necessary to streamline one's equipment as much as possible. I always carry a 4x5 Series D Graflex fitted with an 18 cm Zeiss Tessar coated lens, and, on occasion, a 2½x2½ Rolleiflex in addition. Three filters: K 2, K 3 and G answer all of my requirements in this respect—the last one named being utilized most frequently. A small wooden tripod is standard equipment, and is used on practically all of my exposures—even with the Rolleiflex. And an exposure meter is virtually indispensable. The light values in the desert are unbelievably high, and without a meter, one is very likely to come out with overexposed negatives.

My favorite negative material is Eastman's Super XX Panchromatic Film. I use this product in sheet-film form in the Graflex and as roll film in the Rolleiflex. The former is developed in D-76 and the latter in Microdot.

A warm-toned paper seems more in keeping with a desert picture, and for that reason I use either Eastman's

Opal G or Ansco's Indiatone (Kashmir White or Cyltex surface) for making my prints. The former, developed in Selectol, and the latter, developed in Arrol, require no toning to suggest the warmth of the subject matter.

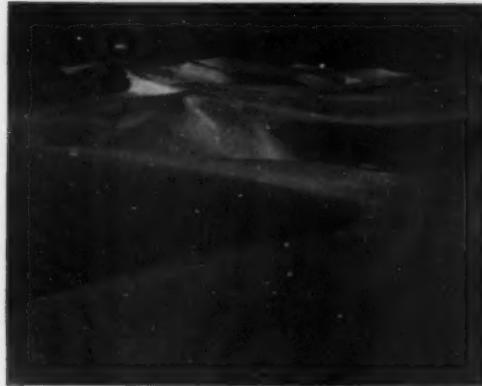
While not exactly a desert picture, the photograph "Gate Ornaments" is reminiscent of Death Valley. In the northern portion of this region is the fabulous castle of Death Valley Scotty. One of the more interesting architectural units of this structure is a large gate composed of wood framework and ornate metal grilles. The accompanying illustration features the gate handle and latch of this massive entrance. The success of this picture emphasizes the pictorial truism that the part is often more interesting than the whole.

If any of you have read this far, it must be that you have a definite interest in desert photography. Therefore, if you should ever happen to be in the vicinity of Death Valley—particularly near Stove Pipe Wells, I recommend that you hike into the dunes and try your luck. With any reasonable degree of proper weather conditions, and the observance of the suggestions embodied herein, you should be amply repaid for your efforts.



"FALL SCENE"

M. M. Deaderick, APSA



"Death Valley Dunes." Taken in mid-morning under a flat light.

"RHYTHMIC DUNES"

M. M. Deaderick, APSA

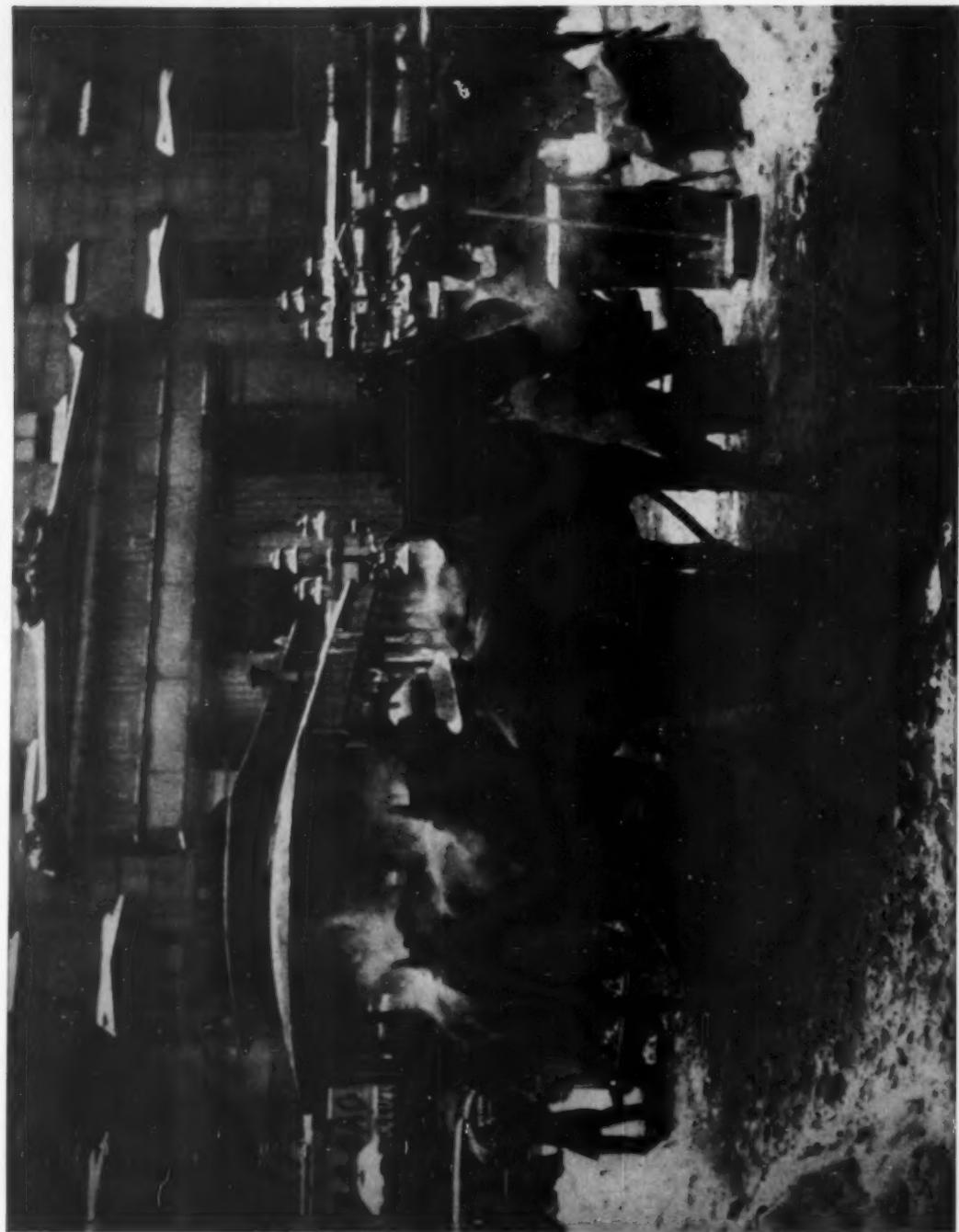
CONVENTION HIGHLIGHTS

Who Dunit?—Michigan State Police "Crime Laboratory" program is as full of suspense as any murder mystery on the radio. Bring the small fry to this program too. Thrilling! Factual! Exciting! The real McCoy.

Common Errors of Subject Handling and Their Remedies—a feature of the Photo-Journalism Division. Experts show how to get away from trite poses.

Ed. Purrington—manager of the well-equipped photographic department at Ford Motor Company, shows how a big industrial firm does it. Educational!

Doris Weber—feminine camera fan who surprises you by making a specialty of photographing steel mills, conducts the program on small prints—8 x 10 and under. A real help to the beginner. Be sure to hear this at Detroit in October.



"THE TERMINAL" 1892

Alfred Stieglitz, Hon.FPSA

points until, under proper conditions, however transient, the scene's inherent or acquired beauty could be captured in a photograph.

Their work represented progress. Previously, if one captured the stark outline of a farm house, and the farmer's son was recognizable as a human being, that was a photograph. Their work was different, interpretive, creative, especially in that day of the sun-behind-the-photographer, get-everything-in-the-picture, you-push-the-button-and-we-do-the-rest. However, such progress was not the result of art alone, but of photographic sciences. Compared with today they used crude equipment, but it was better than ever before available.

Along came Pirie MacDonald, the famous portraitist. His fondness for soft-focus lens and his aversion to details, such as ears, reflected his personal feeling for portraiture. Character, he said, best is revealed by the eyes and the mouth. These are adequate to create image and feeling.

Stieglitz, MacDonald, and their confreres, developing the artistic phases of photography, undoubtedly were in advance of their times. They gave the photographic pendulum a push. Naturally, it went too far. Enterprising souls daring to be different came up with the idea of using the soft-focus lens universally and eternally. Their photographs now are scorned as "fuzzygraphs." Still, in their own opinions, they went all out for Art.

Came the day of the so-called "visual quality" lens. It put one plane in sharp focus, let the others fall where they might. The resulting photographs were not out of focus. They had some extremely sharp portions. Superimposed upon these were less sharp portions. The result was artistically pleasing—to many photographers. Others disliked it.

Prints were not only soft, but extremely flat—by today's standards. There were no black-blacks, no white-whites. Only the middle tones were used. Ability to control these middle tones, and to eliminate the upper and lower fourths of the tonal scale, measured the ability of the photographer.

These prints, however short in scale, exhibited some admirable attributes. The placement of the masses, of the light and dark areas, achieved beautiful balance. Composition was a matter of feeling rather than geometry. These pictures had organization. They were emotionally satisfactory. Their overall result was pleasing. For a generation which evaluated culture in terms of gingerbread architecture, bustles, mustaches, impractical furniture, artistic deception, and other flights from reality, these photographs were well adapted.

Trouble arose when these photographs were produced universally, eternally, and ad nauseam—regardless of subject matter, purpose, mood, or propriety. Came, as might be expected, the revolution. The era of softness gave way to the era of needle-sharpness—aided and abetted by progress in the scientific phases of photography. Photographs once suggestive of omelets became definitely pictures of fried eggs. Every pock of the yolk and every bubble of fat made themselves pitilessly apparent. Everything was sharp—and proud of it! The day of realism had dawned.

Thus conditioned to harshness, photography went, or was pushed, into the candid camera craze. Sharpness and candor became main objectives. The photograph of the sneeze, the Bronx cheer, the hair in the mole on grandmother's chin—nothing was left to the viewer's imagination. Candor and *nth* degree detail produced pictures with an impact which forced the viewer to sit up and take notice.

What happened next was just what you might expect. Having acquired lenses sharp to the proportion of a gnat's secondary whisker, photographers proceeded to place texture screens over the paper. Here, again, was flight from reality; an obvious return to imagination and idealization if only through the dubious medium of the texture screen.

If no texture screens were available, some soft material was waved under the enlarger lens. Photographers were known to expectorate upon the camera lens. They were after the soft-sharp and sharp-soft effects with something of the pleasing broken lines of the soft-focus lens days. Almost, but not quite. They were seeking to create, not to imitate.

Thus the swinging of the pendulum which, in changing direction, always carries a little of the old into the new, produced something of a renascence of imagination. Once again the viewer was credited with intelligence; given a chance to see the photograph intellectually.

You see, friend, a photograph can be like the garrulous man you meet on the train. You are forced to learn his family history right down to the ninth inning of his kissing-cousin's halitosis. In 10 minutes he's as transparent as plate glass—and just about as interesting.

You're much more fascinated by the blonde in the dining car. She tells you little or nothing; intrigues you much; and your imagination goes to work. And what a job it does! Are you concerned with reason, understanding, meaning? Do you look for candor, interpretation, beauty? Of course you do, and quite instinctively. All these elements and attributes combine to create the picture you carry in your mind.

That's just about where we are today. Striving for photographs which incorporate *all* these helpful attributes and which, resultingly, intrigue our interest, create an impression, and shift our imagination into high gear. We do not know and we cannot tell whether the resulting emotional reaction is the effect of softness or sharpness, of broad strokes or narrow detail, of many tones or few. And, except for purposes of analysis, why should we care?

Of one fact we may be certain. The world today has new and greater confidence in the capabilities of the photographer and of photography. At long last it is accepted that the camera can produce beauty, undertake reportage, disseminate propaganda. It can sell, teach, convince, confirm, please, annoy. It can move men, and the emotions of men. It has become virtually as facile as the artist's brush!

Why should anyone disdain any of these facilities of photography when he can use any or all of them to gain his ends? Is the news picture less newsy because it is pictorial? Must the pictorialist disdain to employ the applicable techniques of the photo-journalist? Must the



SOLITUDE

Betty Henderson Hulett, APSA

maker of portraits close his eyes to the arts of the landscape photographer, or vice versa? Why build spite fences about every field of photography?

Why be so dismally definite about what is good or bad in any school of photography or in any technique so long as—properly evaluated in the light of its own purposes and results—it incorporates some degree of excellence? What the world of photography needs is less concern over these supposedly irreconcilable schools of thought and more active interest in applying and adapting the best of each to produce a result which is generally excellent. Let each school say well, or show well, what it sees, or feels—or means. Let each camera artist do sincerely and wholeheartedly and well that which he desires to do. Let him put his best self into his work and utilize every photographic technique or school of thought which is appropriate.

Present tendency is to blame the salons, and, especially, the pictorial salons, for exerting a reactionary influence upon photography. Salons serve the excellent purpose of enabling camera artists to display their pictures. Salon judges and juries serve the excellent purpose of selecting those pictures which have merit. However unfortunately, judgment is a human attribute. And excellence is a matter

of human opinion. Recognizing the possibility of human failing, and human failings, the camera artist participating in salons can have some confidence in the law of averages. Rejection by one salon means nothing. Rejection by several salons could serve as an indication that something is wrong. The artist's work may be unsatisfactory. He may be out of step with the times. Indeed, the artist may be in advance of his times. History is replete with instances of artists who, spurned by their own generation, were honored a century later.

No law, and no amount of argument, can change the situation. He who creates and exhibits must accept the judgment of his fellows and of his time. It must be remembered, and reiterated, that judgment and excellence, as well as judgment of excellence, are matters of human opinion.

Equally human is the striving for self-expression. There is no reason, for instance, why the photographer cannot, if he so choose, put meaning into his pictures. Also, he should have full and free right to create pictures which may have meaning only for him. His fellows have equal right to misunderstand! But when we say he *must* put meaning into his photographs, or that his photographs *must* be sharp, *must* be soft, *must* incorporate social significance, *must* have beauty, *must* reflect the world about us—then we are curbing, nay, we are sacrificing, a great and precious freedom.

In other words, the photographer should have the right to create. Equally, he should have the right to make any kinds of photographs he desires. And equally the world is going to judge the excellence of his photographs by its own jaundiced, fallible, human reaction to them!

Suppose we do, and in a big way, go in for photographs with meaning. Suppose even that we find a way to discover what every photograph means. Within a decade, or less, there will be those arising to say, shout, and complain that the widespread acceptance of photographs with meaning is handicapping the progress of photography! They will seek to give the pendulum a shove in another direction.

See what we mean, friend, by photographic fads, fancies, and fantasies; all the time, change? How can the photographer keep in style and in step with the times and the trends? Well, frankly, he cannot—and perhaps, for his own peace of mind, he should not. But he should be alert and observing and adaptable. Photographic progress is, fundamentally, a matter of living and learning, of adapting and applying. Of maintaining one's artistic sincerity. Of refusing to join the panic until the objectives are clearly defined. Of being alert but aloof until the new is proved better than the old. Of applying and adapting the best of the new to the best of the old.

Always something different. Always a ferment. Always a controversy. And always an opportunity for the camera artist to do, and to achieve, that which lies closest to his heart. Meaning, when others seek imagery. Candor, when others create beauty. Imagination, when others seek realism. And eternally the possibility of combining all these attributes in really wonderful photographs.

Interesting, lively art—and science—this photography!

Genus Photographer *

JOHN ERITH, FIBP, FRPS

WHEN photography was regarded primarily as an art, those who practiced it could be lumped under the classification "photographic artists." Such simplification no longer is acceptable. Photographic processes are employed for so many purposes and cover so wide a field, that the photographer has become a complex species whose members reveal infinitely varied interests, qualifications, and characteristics.

Classifying photographic acquaintances affords opportunity for quiet amusement. It works two ways, of course. Anyone annoyed or angered by suggestions that he belongs in a group unworthy of his talents can find comfort in the thought that the aspersion probably is the result of jealousy on the part of rivals. Or that he can classify these upstarts in the same, or preferably, less laudable groups. Or, should the classification be appropriate, can seek revenge by improving his abilities, reaching a higher status, and thus confounding his critics.

The main types of photographers fall into eight distinct groups:

1. Button-Pressers
2. Gadget Fetishists
3. Hit-or-Miss Optimists
4. Theoretical, Technical, and Gadget Dabblers
5. One-Operation Experts
6. Stunt-Merchants and Imitators
7. Pseudo-Photographers and Arty-Crafties
8. Expert Craftsmen-Technicians.

Numerically, the Button-Pressers comprise the largest group, although the true Button-Presser is less interested in photography than in the fact that he can achieve results adequate to his purposes without special aptitude, skill, or training and at moderate expenditure of money, time, and materials. He remains perfectly content to press the button and to let the commercial developers and printers do the rest.

The Button-Presser uses photographs as a convenient means of reviving memories of persons, scenes, and events. The powers of association are remarkable attributes of the human mind. A photograph which shows only a crude approximation of the actual subject is suf-

ficient to conjure a mental picture of the circumstances at the time the exposure was made. Whereas a stranger may see only a small, out-of-focus snapshot of a girl under a tree against the background of a house tipped to dangerous angle, the Button-Presser sees, or visualizes, that sunny afternoon when his fiance posed beneath the apple blossoms in the garden of her parents' home, her auburn hair flecked with sunlight, her expression beatific, her blue eyes sparkling. Odds are that he does not realize he is doing this; also that he believes the pleasure he finds in the print is shared by those to whom he shows it. Those who know his fiance are likely to react in the same way. Those who have no associations with person or place see only a snapshot. Their boredom is considerable.

Many Button-Pressers, with the aid of expert developing and printing firms, produce results of excellent quality, although the unconscious influence of memory is likely to falsify the Button-Presser's evaluation of his own work. The value of photographs to revive past memories should



Gadget Fetishist

* Based upon the book, "Erith on Pictorial Photography," to be published by The Fountain Press, London, with the permission of the publishers. Will be available from PSA JOURNAL upon publication.

not be under-estimated. They satisfy a deep human need.

Button-pressing leads in many cases to a desire to produce something more ambitious and thus prompts the beginner to take a serious interest in photography. The Button-Presser justifies respect for being the mainstay of a great industry.

Gadgets, Gadgets, Gadgets!

The Gadget Fetishist, strange manifestation of this mechanical age, came into full flower with the 35mm camera. His distinguishing characteristic is a love for the superb workmanship and mechanical perfection of expensive modern cameras and accessories. Such is the intensity of his passion that he is often prepared to spend quite large sums of money in order to acquire gadgets, although he seldom takes the trouble to learn how to use them.

Really a de luxe Button-Presser, the Gadget Fetishist produces results often inferior to those of users of inexpensive equipment. While his main ambitions are satisfied by ownership and pleasure in handling the gadgets, in many cases the reverent admiration of non-photographers and Button-Pressers tempts the Gadget Fetishist to pose as an expert. The difficulty of producing adequate results suggests several escapes. He deludes himself that his photographs appear to others as they appear to him, and remains blind to their shortcomings. He uses every form of evasion to avoid showing his prints, except to the completely uncritical non-photographers. Or he decides to learn something about photography, and becomes a member of a higher group as his aptitude, perseverance, and ability permit.

In time the Gadget Fetishist may fit out a darkroom, although such action may be prompted chiefly by the desire further to indulge his fetishism through acquisition of darkroom equipment. It should be remembered that, but for the Gadget Fetishists, it would not be a financial proposition for designers and manufacturers to produce the many accessories which, properly used by experts, enable outstanding results to be achieved.

Rose-Colored Glasses

Hit-or-Miss Optimists, who may be sub-divided as Elementary and Advanced, also bloomed with the 35mm camera. The Elementary Hit-or-Miss Optimist usually is a Button-Presser who has begun to see the light. Having noticed that experienced photographers seldom use inexpensive cameras, he ascribes their success to the possession of costly equipment, and proceeds to buy a miniature. This is a dangerous stage, because he is likely to become so discouraged with results that he sells his miniature and abandons photography; or he returns to the inexpensive camera and button-pressing; or he becomes a Gadget Fetishist and seeks prestige by displaying an imposing array of gadgets; or he will make a great number of exposures in order to obtain a few passable results; or he will bolster his ego by attempting to justify freakish results as "New Art."

The Advanced Hit-or-Miss Optimist has mastered photographic processes sufficiently to produce record photographs, but knows little or nothing about art and hopes that a generous number of exposures will yield at least some prints justifying appreciation on artistic grounds. In many cases he is encouraged by an occasional fortunate accident, always confident that the next exposure will produce a winner. Alternatively, he may decide to stick to straight record work, or, if he has the right stuff in him, resolve to learn something about the qualities that distinguish works of art; in which case he is likely to produce imitative results rather than pictures showing marked originality and artistic perception. The artist with pronounced natural gifts never would become a Hit-or-Miss Optimist.

Dabblers and Dabbling

The Dabblers tend to defy classification because of their diversity. Theoretical and Technical Dabblers have little in common except, like the Gadget Dabblers, their interest is centered upon the means rather than the end. The Theoretical Dabbler is fascinated by the theoretical aspects of photography. He reads photographic books and magazines; talks with fluency about the reciprocity law, meter-candle-seconds, log exposures, gamma. Even experienced photographers occasionally are taken in.

The Theoretical Dabbler's thirst for information is directed to no particular end. He contributes no original thinking, and is quite incapable of putting his knowledge to practical use. He is reluctant to display his own photographic work for fear he will disillusion the non-technical who regard him with awe.

There is another kind of Dabbler, closely related, but with a weakness for theorizing about composition. He talks with enthusiasm about unity, chiaroscuro, dynamic symmetry, phi proportion, but lacks any proper understanding of the creative qualities which form the life-blood of real art. Usually incapable of producing adequate pictures, with his work likely to be imitative, his favorite hunting grounds are the portfolio and the camera club. He can be persuaded to address the camera club, illustrating his talk with reproductions of the familiar paintings of the old masters. As a stop-gap lecturer, he is a godsend to harassed program directors. He is unlikely to do serious harm, although he may do little good.

Trying Something Else

The Technical Dabbler's peculiarity is a love for experimenting with photographic processes. Although he is unaware of the fact, the result usually is secondary with him. He is always trying a new developer; changing to another type of film or paper; making up a different kind of intensifying, reducing, or toning solution. He tries the effect of various diffusing material over the enlarging lens, prints through texture screens, essays paper negatives; and processes, such as solarization, which are uncertain in their results, utterly fascinate him.

The Gadget Dabbler is near cousin to the Technical Dabbler, with a main concern for experimenting with



Craftsman-Technician (left). (Center) General illustration showing despair of salon jury over repetitive imitations. (Right) Button-pusher.

gadgets. He is forever buying, selling, and exchanging gadgets. His interest in an item of equipment lasts only so long as he is amused by experimenting with it. Seldom does he have sufficient patience to master its use. He is closely related also to the Gadget Fetishist, but his passion is experimenting whereas the Gadget Fetishist desires possession.

The Dabblers often are extremely happy hobbyists. Occasionally, they produce effective practical results. There is always the possibility that, in time, a Dabbler may be led to more worthwhile photographic pursuits. Even as he is, the Dabbler is a good friend of the photographic manufacturer and dealer. Sometimes even experienced photographers become Dabblers, if temporarily, although their experimenting is directed to worthwhile results. They seldom become true Dabblers.

Single-Minded Specialists

The One-Operation Expert customarily engages in photography as a means of livelihood. Starting as apprentice, he becomes printer, retoucher, or finisher. In these more enlightened days, there is a growing tendency for employers to afford opportunity for their workers to obtain adequate theoretical knowledge and practical experience in all the photographic processes.

Stunts and Imitations

Stunt-Merchants and Imitators share their classification with the Gadget Fetishists, Hit-or-Miss Optimists, Theoretical, Technical, and Gadget Dabblers, Pseudo-Photographers and Arty-Crafties—and sometimes with the Expert Craftsmen-Technicians—whenever these various photographers attempt to produce photographs of a certain kind purely in order to attract attention or to gain prestige. The Stunt-Merchants photograph unsuitable subjects from unusual viewpoints or under peculiar lighting conditions, and without regard to the accepted conventions of picture-making. The sole criterion is that the result shall catch the eye. Startling originality being

difficult, considerable piracy goes on. If some member of the fraternity gets into the limelight by exhibiting a certain type of print, the salons can count upon receiving a veritable flood of prints on similar themes made by others anxious to cash in on the publicity.

The Imitators are not limited to Stunt-Merchants. In fact, many young photographers developing ability to produce reasonably good technical results proceed, whether consciously, to imitate the style or work of those they admire. This is a perfectly normal and desirable procedure. In due course, if he has the gift, and if the copied work is sound, the photographer will develop a style original to himself.

However, there are Imitators of another kind who, lacking in originality and artistic talent, deliberately imitate the style, treatment, and, sometimes, the subject-matter favored by others. The results may be technically first-rate, and sound in composition, but artistically sterile.

Efforts of the less-blatant Stunt-Merchants frequently are amusing and often have a freshness and vitality lacking in much so-called "artistic" photography. They shake up the conservatives, question the conventions, give ideas to others of greater ability. Invariably their efforts are taken much too seriously by the traditionalists, whose disapproval with excessive vehemence is exactly what the upstarts want. The resulting publicity convinces them that they are crusaders whose artistic genius is being assailed. The passions aroused on both sides produce verbal upheavals which are unjustified by the cause. After a while, the shouting and the tumult die, leaving all concerned looking rather foolish.

There is always danger that the genuine creative artist inspired by originality of vision may be classified with the Stunt-Merchants and become the focus of derision and attack. Many of the truly great artists have been reviled by their own generation and venerated by the next. Minds, and exhibitions, should not be closed against those whose work appears to challenge the existing outlook.



Theoretical Dabbler



Stunt Merchant



Theoretical Dabbler, Composition Expert Type

The Long-Haired Mob

The Pseudo-Photographer may be defined as one who attempts to infuse artistic qualities into the photographic picture by means of the so-called "control" processes, such as oil, bromoil, and bromoil transfer. Arty-Crafties are workers who employ the methods of the Pseudo-Photographers, not because of ability or of desire to create works of artistic merit, but because they enjoy messing about.

Pseudo-Photographers and Arty-Crafties may be related to the Imitators, the Dabblers, and to a group of workers which cannot resist the temptation to indulge in an extensive amount of hand-work on negatives and prints with a view to adding "artistic appeal." Some Stunt-Merchants also belong to this group, which might be called the Semi-Pseudo-Photographers. The aim of these workers is to preserve the characteristic appearance of straight photographs. When the subject-matter is photographed in the modern manner and the retouching is skillfully done, the resulting pictures are likely to be favorably regarded by the less discriminating.

Up the Technicians!

Minimum qualification of the Expert Craftsman-Technician is ability to produce photographs of consistently good technical quality. Members of this group may use the photographic processes as a hobby, as a means of livelihood, or as a scientific tool in industry, research, or other specialized fields. Their work may comprise straightforward photographic records, either of a general or special nature; photographs which reflect successful individual interpretation based upon specialized knowledge in fields other than photography; and photographs intended to justify appreciation solely on artistic merit, such as works of art.

Broadening Pictorialism

The majority of books on pictorialism gives the impression that the only pictures worth considering are those which conform to conventions laid down by leaders

of this group's third phase, production of works of art. All other forms are relegated to a lower plane; classified en bloc as "record." This self-sufficient attitude on the part of a small minority has resulted in the inflation of a formalized type of pictorial work to a position out of all proportion to its proper value in relation to other branches.

Applications of photography have been given some 18 major classifications by A. F. Buckness, secretary of the Institute of British Photographers. At least six of these offer considerable scope for pictorial treatment. This classification helps to place pictorialism in the proper perspective. This is all the more necessary because the future of pictorial photography in color will depend to a large degree upon the ability of technical experts previously written off as "Record-Merchants."

Those groups of applied photography which appear to offer scope for pictorial treatment are: Propaganda, a new science of which photographs form an important feature; Travel; Portraiture; Natural History; News and Journalism; and Commerce, an extremely broad field covering catalogs, brochures, posters, and publications.

Only in comparatively recent years has an appreciable number of photographers realized the proper function of their medium when employed as a vehicle for artistic expression. Color processes are still in the development state, and their future value in this connection is difficult to predict. Until a sufficient number of artists with the necessary gifts has produced works of unmistakable value within the range of the photographic processes, there can be, obviously, no complete standard of evaluation and the position of the photograph in art must remain a matter of uncertainty for some time. There can be no doubt, however, as to the value of the photograph in other fields, and pictorialism will reach its highest peak in alliance with certain branches of applied photography rather than as an entirely separate development.

The crux of the matter is that the pictorialist's appreciation of nature, and of the general life and scene around him, is increased because the search for subjects for the camera trains him to see more with his conscious mind.



The color cinematographer must locate his subjects on the edge of jungle clearings. Dick and Ada Bird shooting a sequence on the nest of a member of the tarantula family and its occupants. (Insert) A tarantula sometimes referred to as the bird-eating spider. See footnote on page 500.



A Special Feature on Motion Picture Photography



Along Jungle

A FEATURE BY

Dick and Ada Bird in front of their "Benah." Reasonable precautions were taken with all equipment and film stock. The daily check of cameras for jungle mold, moisture and heat damage before starting out on a new jungle trail.

WHILE it is quite easy to transpose the word trails into trials on the typewriter, the cinematographer who operates in the jungle regions is liable to make the transposition more often and consciously while pursuing his profession or hobby in these environs. Adding quite frequently, the words "and tribulations."

Jungles have been described by explorers and novelists as green mansions, dense tropical regions, blankets of greenery, etc. As far as I have read, no one has built any word picture that adequately describes the density of the masses of tropical growth. Monster trees, festooned with parasitic growths, vines, lianas, tree ferns, orchids, air-plants, mosses and lichens interlacing the smaller palms and lesser trees to the giants into an almost impenetrable green wall. To the photographer, experienced as he might be in the application of his craft in the forests of the north, the jungles of the tropics are a challenge to his skill and ingenuity.

As a matter of fact, cinematography in the jungle is almost impossible. Any light that filters through the dense foliage is insufficient to allow the use of the motion picture camera with its fixed shutter exposure and the limited speed of color film emulsion. One might compare the jungle floor with the interior of a great cathedral, the nave of which is dimly lit by the filtered light from high, stained glass windows. True, with still cameras, color film may be exposed with flashbulbs, but with subjects hidden in the dark recesses of their natural habitats, difficulties are encountered even when small fields of view are included in the shot. It is soon apparent to the jungle wildlife photographer that he must locate his subjects on the edge of jungle clearings or on the great savannahs—prairie areas where grasslands accommodate the colony's cattle raising industry—or on the banks of the great rivers that cut brown paths through the eternal green mass of tropical growth as they flow from the interior to the ocean.

* *Editor's Note.* Pictures of the Birds were made by them with a selftimer. A news reporter asked Dick, "What was the most interesting thing you filmed?" Dick replied, "A bird-eating spider." The news report in the paper later stated, "The most interesting shot made by Mr. Bird was of a bird eating a spider."

The chap behind the camera is fortunate indeed if he finds his subject in one of these sunlit areas and at the same time is able to persuade it, whether it be bird, mammal, reptile, insect or the dark skinned *homo sapien* resident of the jungle, to position itself far enough away from the forest wall to eliminate the heavy shadows of the eternal growth.

As every wildlife photographer knows, the hours and even minutes of clear sunlight are limited in a clearing "set-up" due to the movement of the sun and the presence of surrounding tree growth. The subject that might be in the clear one moment may be in deep shade five minutes later.

The discovery of your first scarlet macaw, leisurely preening himself in an acacia tree, his brilliant crimson head against a verdant green background, is a thrill because it presents itself as a sure fire color shot.

A half hour later, after sneaking stealthily through thorn studded brush, tripping over trailing lianas, releasing from one's bare neck the entangling strands of bush ropes that droop like hangman's nooses, brushing frantically but carefully mosquitoes from bare hands, arms, face and other exposed parts, shaking exploring ants from sweat soaked dungarees, the camera-hunter arrives at the spot where the six inch cine lens will produce a bang up picture.

He finds that although the macaw is still there, (why it hasn't been frightened away by the racket you have made in covering the 50 feet of jungle trail is beyond all conjecture), the colorful setup is ruined because the sun has shifted and there is a dark and heavy shadow like an opera cloak around the parrot's scarlet shoulders. The cinematographer's heat frayed disposition is not improved.

When the Birds (my wife Ada and myself) decided to seek tropical material for future lecture tours, British Guiana was selected, among several reasons, because it is an English speaking Colony of the British Commonwealth of Nations and being in the sterling area our Canadian dollars went a bit further than they do in some dollar currency countries—an important factor in today's topsy turvy foreign exchange situation.

Camera Trails

DICK BIRD, FPSA *

The Hoatzin (*Opisthocomus Cristatus*) on her nest. This bird has a local name of Stinking Hannah. It may be smelled before it is located by sight.



The Colony is situated on the north east shoulder of the continent of South America, between Venezuela, Dutch Guiana and Brazil. It is the only English speaking region in South America. In size, British Guiana is about 83,000 square miles, roughly about the size of the state of Kansas. Of this area, 86 percent is jungle or forest, 10 percent is savannah or prairie while the remainder lies in the coastal belt, where over 90 percent of the estimated 375,000 population live. In these days of speedy and comfortable travel, this tropical region, which is but a few degrees from the equator, is but a short distance from Canada and the United States.

One Thursday evening in February 1950, with the thermometer reading 22 degrees below zero, the Birds boarded a Trans Canada Airways plane at Regina, Saskatchewan, after supervising the loading of 17 pieces of baggage, 15 of which contained photographic equipment—cine cameras, extra magazines, still cameras, film cases, still and motion picture film, tripods, flashbulbs, binoculars, etc. Two small suitcases accommodated our personal effects.

Early next morning we were in Montreal spending the day with officials of the Canadian Customs, making arrangements to insure the return into Canada of all our equipment and film without import difficulties. This, by the way, is something every user of photographic equipment who travels from his own country and across foreign borders should do,—a precaution that has saved us many delays and much argument when returning to our own country from foreign photographic forays.

Friday evening with the temperature 18 degrees below the zero mark, we swung aboard a sleek Trans Canada Airways North Star Airiner and watched with satisfaction a blizzard left behind. Before midnight, we touched down at Bermuda and shed our winter clothing. At daybreak we looked down on that verdant Caribbean Isle, Barbados, and after an hour there, were comfortably winging our way south to Trinidad. A quick transfer here and then a two hour flight to Atkinson Field, the airport of Georgetown, capital city of British Guiana.

For a half hour prior to landing the flight crosses a part of the British Guiana jungle. As the endless green carpet unrolled below, I recalled my first experience in the South

American forests, years ago. Of Redfern, the American aviator, lost along these same flight paths. This green mass below had swallowed up his plane and still held the secret of his fate.

Georgetown is the seat of government, and government is as British as it is in any colony or protectorate in the British Empire. It is a city of some 75,000.

One of our first subjects was the colorful and impressive ceremony of the opening of Parliament. Accompanied by a mounted escort of black police with pennants proudly fluttering from erect lances and riding horses, many of which were Canadian bred, the Governor and his Lady, swung into the driveway entrance of the Legislative Buildings to the smart military pace of the white uniformed police band assembled on the green lawn out front.

The inspection of the guard of honor, khaki uniformed men of the British Guiana Volunteer Regiment, by the Governor and Regimental Officers, was a colorful affair. Preceded by his military and naval aides, the Governor in cocked hat and plumes, walked slowly between the ranks of dark skinned troops standing smartly at attention. The Commissioner of Police and his Deputy, in dazzling white tropical uniforms and silver spiked white pith helmets, followed the inspection party. A colorful spectacle as smartly done as the similar ceremony performed at the opening of the Parliaments of our Canadian provinces.

We were fortunate that our arrival in the Colony coincided with an official visit of Princess Alice and her husband, the Earl of Athlone, former Governor General of Canada. The Princess is an aunt of George the Sixth, present King of England. Graciously, the Princess participated in the solemn and impressive ceremony, traditional in the British Army, the Consecration and Presentation of the Regimental Colors to the British Guiana Infantry. The stirring slow-march of the khaki clad Negro and East Indian troops, all volunteers, was a feature worth recording.

The color photographer has just one complaint about these interesting and dramatic ceremonies. For the comfort of the participants and spectators, the affairs are usually held late in the afternoon when the intense heat of the tropical sun has somewhat abated. Before the fin-

ish and usually about the time of the most interesting feature, long shadows from tall palms are creeping across the subjects and the light is yellow as the sun approaches the jungle horizon.

While photographers in North America anticipate longer hours of daylight and shooting time as spring and summer advance, the hour of sunset varies little the year round near the equator.

Our principal interest being the jungle proper, we left Georgetown and its comfortable hotel accommodation, cold showers, clean sheets, filtered water, boiled milk, iced rum and gingers, afternoon teas and swizzle parties, and travelled into the interior of the country.

Eighty miles up one of the chocolate colored water courses that slice the colony into segments and which bear such intriguing names as Demerara, Berbice, Essequibo, Mahaicony, Potaro, Corentyne, etc., we occupied in splendid isolation, a palm thatched shelter where two hammocks could be strung and the occupants sheltered from the elements. Our "benab" was a bit ultra inasmuch as it had walls although there were no doors. True, the walls were of rough poles between which light and air streamed and not so solid that insects, bats, reptiles and rodents could not swarm easily through to share the shelter with us. Not always were these guests welcome.

In one corner of the shelter atop a wooden case of flashbulbs rested a large U. S. Army haversack (surplus) in which we carried or stored various items of equipment, plastic sheets, hip boots, blankets, etc. These haversacks are handy rigs for the trail photographer. They accommodate a lot of equipment and leave the hands free for climbing, clearing a path through forest growth or the handling of binoculars.

There had been no occasion to disturb the haversack for several days until I needed a pair of waders to try for some close-ups of a feeding manatee in the nearby river. Mosquito nets draped from a Rube Goldberg canopy affair over the two slung hammocks and the usual litter of tripods, camera cases and equipment covered the benab floor. I stumbled as I reached forward to delve into the open haversack. The slip caused the bag to topple sideways. A five foot fer-de-lance slithered out of the open top and into the thick grass alongside the shelter. I must have stood for several minutes, off balance as I was, like a model caught by the cameraman's "hold it," while thoughts raced through my mind. Had I not stumbled over my clumsy feet, my hand would have dipped into the canvas bag, touched the startled snake and being the venomous viper that he is, and we being 80 miles or two days water travel distance from the nearest anti-venom laboratory, what a spot we'd have been in. The benab was very cool and quiet, I could almost hear myself sweating.

Lessons are speedily learned in jungle regions. When stalking subjects quietly as nature photographers must, one watches each step and where it is put. It is a trifle disconcerting at times. To be quietly advancing through the tangled undergrowth, binoculars swinging across the chest, a Leica slung over one shoulder and a haversack with spare film magazines hanging from the other. A

Cine Kodak Special plus a Professional Junior tripod hugged somewhere in between. Face turned upwards and eyes glued to the spot where an inquisitive kinkajou had been observed, peering timidly through the foliage at the intruders in his ballywick.

The right foot is lifted cautiously and a more or less silent step is taken. The ground suddenly heaves. You lose your balance and fight desperately to regain it and protect the binoculars, cameras and other burdens. You've stepped on a three foot salipenter, a large yellow and black lizard with a nasty disposition. He has, quite naturally, resented being awakened from his siesta beneath a large banana leaf by a number nine shoe planted on his sacroiliac, if lizards have such a thing. The brute departs quickly with some noise. You recover what is left of your equilibrium to find that the noise you have both made has frightened the pop-eyed kinkajou aloft and out of camera range.

The jungle nature stalker learns it is not conducive to comfort or health to reach into cavities in tree trunks or under logs or even between camera cases that have been undisturbed for several days. Reptiles and very undesirable creatures like scorpions, centipedes, wasps and stinging ants prefer these dark recesses for their own private purposes.

The subject of food supply is quite interesting. There seems to be a slight misconception about the jungle as a place where the traveller may live with little effort on exotic, tropical fruits. While there are, (as many members of the Allied armed forces discovered in jungle warfare) some edible plants and roots in the heart of the tropical forests, these as a steady diet will not add much to the waistline.

Our meals had a cosmopolitan flavor in the benab. At one time, an upturned camera case, our dining table, supported an array of tinned goods that included canned cheese from Australia, cornflakes from England, bacon from Denmark, apricots from California, tinned ham from Holland, orange juice from Jamaica, sardines from Norway and Portugal, canned tomatoes from the Bahamas, powdered milk from Quebec and spaghetti and meat balls from Chicago. Our rubber soled, canvas topped jungle shoes were made in Czechoslovakia and the pencil I was using for my field notes was stamped, "Made in Hong Kong."

In a littered corner of the jungle bungalow I unearthed a well thumbed and much abused copy of a true confession magazine. The few pages still readable featured a lurid tale, titled, "To Give My Child a Name."

A word or two about insects although this subject dominated all jungle conversation. One of the worst of the many pests is a tiny red mite known as bete rouge. This can and does make life miserable. So small are these persistent burrowers that they are difficult to see but, can they be felt! At one time, each of my insteps had over 250 bete rouge bites from toes to ankles. These crimson spotted extremities make a lovely Kodachrome.

Unexpected surprises and discoveries keep the jungle wildlife photographer on his toes when searching the trails for interesting subject material. A small twig along

our jungle path seemed to have snared the tiny feather off a white heron but because we were not in heron territory, we stopped to examine it. While I was peering at the fluffy white object with my pocket magnifying glass, the "feather" ambled along the twig and out of my field of vision. It was a "hairy worm" of which the native Indian takes a dim view. According to the jungle grapevine, the hair of this tiny creature, in contact with the human body, causes more irritation to the owner of it than a hundred insect bites. We shot it, using the 63mm Ektar with a half inch collar for extreme close-ups of the creature's tiny feet hidden below its feather covering and left it cantering back and forth along the small twig.

Squatting miserably near an animal trail under rubber ground sheets draped across our heads and shoulders as protection from the fury of a sudden—and how sudden they can be!—tropical thundershower, we heard a squeal of alarm from some small mammal right above our heads. Directly in front and not more than three feet from our faces, the bare branch of an old tree slanted across our line of vision. As we peered glumly from under the dripping edge of the tarpaulin, a grey head slid along the bough, a forked tongue flicking in and out ahead of it. The flattish head was followed by a beautifully marked body about as thick as my upper arm. This moved along the branch as smoothly as thick syrup pouring from the spigot of a cask of molasses.

Fully ten feet of this colorful boa constrictor flowed silently past our rigid noses. The five feet or so at the tail end of the reptile was more brilliantly colored than the fore part. The slow procession of pattern paraded past in endless sequences of red, brown, and other hued designs. It seemed hours passing a given point, our startled gaze. Of course, it could not have been a period as long as that because we had been holding our breath all the time and when the reptile had disappeared, we were still alive and breathing but with some acceleration. I could easily have reached out and felt the rhythm of movement in this slow moving body, but my hands were engaged holding up the ground sheets so the rain wouldn't cascade into our laps. Of course, there was little cause for apprehension. Herpetologists tell us that boa constrictors, even ten foot long specimens, are gentle and affectionate creatures!

A few days later we were trying for some cine shots of an eight foot anaconda, a constrictor fairly common in moist localities. We had found the dark brown snake in a small marsh. Ada was attempting to "haze" the creature into better shooting position for me with the cine outfit set up on the dry bank. She was wading through a few inches of water in the marsh, slowly moving towards the reptile in such a position that the snake would move away from her and towards the camera.

In such a set-up, actions are slow, deliberate and necessarily very quiet. Naturally all concerned are absorbed in what each is doing. Soon, the anaconda had slithered into perfect position about ten feet from the camera. I quickly focussed the 104mm lens and punched the button of the Special. The camera motor whirred and the reptile lifted its head and looked directly into the lens.



One might compare the floor of the jungle with the interior of a great cathedral, dim light, spotty highlights and dense shadows. Jungle photography is a challenger to the ingenuity of the color cinematographer.

Not that it could hear the sound of the mechanism, it is understood that snakes are deaf, but the action made a nice shot. I was centering all my attention on the subject and the camera manipulation. Ada, standing facing me but out of camera range, could see the marsh bank on which I was standing. She whispered the information that something was moving in the grass behind me. I lifted my finger off the exposure button and heard a slight noise such as might be made by crisp cornflakes being poured into the breakfast bowl.

I turned my head slowly to see a coiled snake, the slightly vibrating tail identified its owner as a jungle rattlesnake a mite nervous at the presence of strangers. Although I was three paces from the diamond designed reptile and the heat was very oppressive, there were several areas of my naked back, definitely chilly.

A cine-occupational hazard of the tropical forests is the approach of the rainy season. There are two of these in British Guiana. Pessimists—probably nature photographers—have been known to remark that the only difference between the dry and rainy seasons is that it rains a little more in the latter. Heavy and sudden rains promote problems in shooting. At one location on the savannahs, we had under observation some 28 nests of ground and low bush nesting birds.

In a 24 hour period, the official rain gauge of the district recorded eight and eight tenths inches of rain. The savannahs were flooded a foot deep and every nest and its contents were destroyed.

Sudden downpours require protection for camera equipment. We found it very advantageous to carry at all times sheets of plastic a yard square, the material used for shower curtains. These sheets fold into small space and may be carried in the camera case or in hip pockets. With a couple of dome fasteners in each of four corners, these may be thrown quickly over the camera and the corners domed between the tripod legs under the pan



KINGSTON COOPER SHOP, Greenfield Village, Dearborn, Michigan,—a PSA Convention highlight for movie makers. The Kingston Cooper Shop was erected in Kingston, New Hampshire, in 1785, soon after the American Revolution, and is the oldest American workshop in the craft section of Greenfield Village. Old-time coopers built watertight hogsheads for commerce, barrels for shipping fruits and vegetables, buckets for maple sap, and wooden pails for every home. The Cooper (above) sits on the schnitzelbank, or shaving horse, and shapes staves. Photo courtesy of The Edison Institute.

head. It is not necessary to remove the machine from the tripod with this waterproof babuska. Two of these sheets, fastened together with the dome fasteners, make an excellent cape for the protection of the fellow behind the camera also.

All motion picture material was shot on Kodachrome Film Daylight Type at 24 frames per second and an average lens aperture between f/5.6 and f/8. This is the normal exposure recommended in the exposure guides included with each roll of film. Exposures varied little with those used for similar subjects in forest regions of North America.

Reasonable precautions were taken with all film stock. As we were in a British colony, it was not difficult to obtain from Georgetown department stores the square tin boxes used by English biscuit manufacturers to ship and display their products. These tins, when covers were sealed with adhesive tape, are excellent storage mediums for film, either before or after exposure.

Every night, all exposed film was repacked into the original containers. Completed rolls of 100-foot Kodachrome were removed from the Cine Special magazines and placed in the original cans, sealed with black tape and stowed away in Messers Huntley and Palmer's fig newton boxes.

Exposed rolls of No. 120 Ansco Color, used in our Zeiss Super Ikonta for $2\frac{1}{4} \times 2\frac{1}{4}$ transparencies, were returned to the original lead cylinders, the round top sealed with tape. The exposed 35mm Kodachrome cassettes likewise were sealed in the Kodak screw top containers.

Exposed 4x5 Ektachrome sheets were carefully placed

between the original black paper, sealed in tin foil and replaced in the original packages.

As far as possible, all magazines and film holders were reloaded after dark. Not one of the 120 rolls of 16mm Kodachrome showed edge fog at the beginning or end of the roll. This justified the extra chores after the evening meal and the fumbling around in stygian darkness with hands and body dripping perspiration. Ada stood in front of the upended camera case, flicking a towel to cool the sweating brow and discourage night flying insects from lighting and biting.

Only after several dry cleanings in Canada was it possible to rid our clothing, leather boots, canvas shoes and camera cases of the musty odor of jungle mold.

Film was packed and shipped to the Canadian Kodak Company in Toronto for processing as soon as convenient after each journey to shooting locations.

Of the 12,000 feet of 16mm Kodachrome exposed, none was spoiled by moisture or heat, although at times the two cine cameras, a Model I and a Model II Cine Kodak Special, of necessity, were exposed to tropical sun until the metal cases were hot to the touch. Naturally, every effort was made to protect equipment from the heat, but it has been our experience in nature photography that it is very rare that one can find a subject performing in the hot sun, so the cinematographer may sit at ease with his equipment in the cool shade. Usually, if not invariably, the set-up is the reverse of this ideal.

I would not care to leave the impression that every visitor to the colony of British Guiana is in danger of stepping on a dangerous or at least a disturbing reptile whenever he ventures off the verandah of his hotel. This would be untrue. However, it is a fact that these creatures are in the jungle and if you go out looking for them, as we did, you'll find them and get a lot of enjoyment observing or photographing them.

Among the many colorful and interesting subjects we were able to shoot—photographically speaking—were: Toucans, Parrots, Macaws, Mot-mots, Kiskadees, Spurwings, Parson Birds, Anis, Hoatzins, Jacanas, Sakiwinki and Howler Monkeys, Kinkajous, Sloths, Ant eaters, Porcupines, Ancondas, Coral Snakes, Boa Constrictors, colorful Lizards, Poison Arrow Frogs, Vampire Bats, Tarantulas, Scorpions and scores of other interesting nature subjects.

There is an old saying in the Colony. If you drink of the waters of her creeks and eat of the flesh of the labba, a spell has been woven round your heart and wherever you may travel from her borders, someday, the spell will turn your footsteps along the trail that leads back to British Guiana.

Well, we drank of the waters of her dark brown creeks that look like rivers of beer but taste like something else, and we ate the flesh of the labba, one of the largest rodents and found its firm white meat very appetizing, and Ada and I will not put up much resistance to the spell when it starts working because we'd certainly like to follow new Camera Trails along other Jungle Trails in British Guiana.

How To Build the Home Movie Story

"Weddings"

HARRIS B. TUTTLE, FPSA

HERE is probably no more important event to be filmed for the family movie library than a wedding. No matter how small or how simple the wedding is, it is an important milestone in family history.

It would be wonderful to me today if I had movies of my mother and father's wedding. And perhaps even more wonderful if I had a film of my own. They didn't have movies in 1886 when my parents marched down the aisle, and the only 16mm camera available in 1922 was undergoing experimental alterations; otherwise, I could not have had a week off to get married. So all I have is a tintype of my parents on the day of their marriage and a few snapshots of my own.

I've tried to correct matters in my family and have a complete film of my daughter and my son on their wedding days. Now their grandchildren and great-grandchildren will be able to see how they looked on their day of days.

A film of a wedding is about the finest gift you can give to a member of your family or a friend. As the years go by it will become more valuable to them and may be of great importance to their continued happiness.

I've made a great many movies of weddings in the past twenty-five years and only one has ended in divorce. Therefore, I believe that wedding movies do a lot to keep families united. When there is a little family squabble, all they have to do is get out the wedding movies and review the events of that important day, then in no time at all everything's okay.

The details of making a wedding movie are very simple. The plans for a wedding provide natural continuity. It is possible to start the film at any selected point. You can go back to the time the engagement is announced or start with a close-up of the wedding invitation and make a complete record of the wedding gifts—selection and fitting of the wedding dress—posing for portraits at the photographic studio; then make close-up copies of the announcements of engagement and bride photographs as they appear in the local newspaper.

Then, on the wedding day—make scenes of the nervous groom trying to decide which pocket to place the ring in—looking for a collar button and other similar bits of action. Then the groom and best man leaving for the church or place of the ceremony.

The scene would shift then to the bride and her father leaving her home and shots of her and her bridesmaids arriving at the church, and be sure to make plenty of



This scene was shot from choir loft in rear of church. (Right) Similar shot of couple marching back up the aisle.

close-ups in color of the bride, bridesmaids and their flowers.

There are always interesting scenes to be made of the final arrangements and adjustments in the vestibule of the church. Then, finally the moment when everyone is ready and alert. Then switch to a close-up of a sheet of music—showing the name of the wedding march—then to a close-up of the organist's fingers moving over the keyboard. (Scenes such as this can be made the night before during the rehearsal of the ceremony.)

Many couples like to have movies made during the actual ceremony. Some of the close-ups can be faked during the rehearsal the night before, such as close-ups of the minister, organist, soloist, etc. Of course, the bride and groom should not appear in these scenes.

I, personally, do not like to use supplementary illumination in a church during the wedding ceremony. I did it once and the wedding had an atmosphere of a Hollywood set. (This was the wedding that ended in a divorce, so now I am superstitious.) The use of bright lights around the altar seem to create the feeling of a spectacle around an otherwise solemn occasion.

Film can usually be exposed in the church during the



Those last minute details make interesting shots because they are completely unposed and unrehearsed.



Be sure and film the bride tossing her bouquet.

ceremony if the wedding takes place during the daytime and when the light outside is reasonably bright and not blocked off by high buildings or trees close to the church.

It is not always practical to use color film in the church although there may be some instances where the daylight in the church might be bright enough to make movies with an f/1.4 or f/1.9 lens, from the rear.

Since it is difficult to predict in advance whether or not the light will be bright enough to use color film, I always shoot black-and-white in the church on Super-X or Super-XX Panchromatic Film.

If the other scenes of the wedding are all on color film, the black-and-white film used in the church can be tinted or toned with yellow or orange dye, and when these tinted scenes are spliced in with the color scenes, the average person will get the impression that all the scenes were made on color film.

Kodak Single Solution Dye Toner T-20 or its equivalent can be used to tone your films. Practically any desired color can be obtained with this bath.

The next scenes after the ceremony can be made in the vestibule—of the bridal party coming back up the aisle to the rear of the church. Sometimes a receiving line is formed here to provide friends and relatives to offer congratulations. This is an excellent opportunity to make movies.

The next scenes may be of the bridal party leaving the church, the throwing of confetti and rice, and of the cars driving away. Be sure to make a shot of the "Just Married" sign on the bridal car.

The camera may now follow to where the reception is held—here scenes of the family and friends may be recorded. Semiclose-ups and close-ups of the bridal party and immediate families are advisable. Then, of course, the bride's table can be filmed, and close-ups of the bride and groom cutting the wedding cake.

The final scenes may be of the bride throwing her bouquet and the couple leaving on their honeymoon.

If the reception is held in the afternoon, many of the

scenes can be made outdoors in sunlight. If it is held at night, additional artificial illumination will be needed for color, but in cases where Super-XX black-and-white film and an f/1.4 lens are used, additional lighting may not be required.

A sequence of scenes, as outlined above, may require anywhere from two to four rolls of film, depending, of course, on the size of the wedding, and the number of close-ups made.

If the bride and groom do not have a movie camera, perhaps you will loan them yours to make a movie record while they are on their honeymoon.

In making a long-version movie record, the film can start with a close-up title of the newspaper item announcing the coming marriage. The preliminary sequence of scenes can show the addressing of invitations, making arrangements with the clergy, the bride selecting her wedding gown; and shots made at the rehearsal are always funny later. A scene at the jewelers selecting the wedding ring and gifts for the best man and ushers might be made; and a few scenes of one of the showers for the bride or stag parties for the groom might make an interesting sequence.

The filming of all of the bridal gifts can wait until the bride has left on her honeymoon, and this can be done indoors with artificial light at your convenience. This consists primarily of a series of close-ups, by panning the camera (very slowly), of all the gifts arranged on card tables or other suitable supports.

On the wedding day, the continuity is almost automatic. You can enlarge upon this as much as you want to, because often many humorous things happen at the last minute. For example, when my daughter was married, they tried to put the bridal gown over her head without taking the clothes hanger out. They almost tore the dress before they found that the hanger was still inside.

Pictures might also be made of the groom trying to tie his tie or looking for a collar button under the dresser. These humorous scenes could be made several days in advance of the wedding.

The next scenes could be of the bride coming out of her home and getting into the family car to depart for the church. You could then go back to the groom looking through his pockets for the ring, until the best man reminds him that he has it, and everything is well. The next scenes could be of the bridal car arriving at the church and the bride entering the church. It is always interesting to have pictures of the people who attend the wedding coming up the church steps and entering. The bride and groom later get a lot of fun out of saying, "That's Aunt Clara and Uncle Billy," or "There's Mrs. Pendergast."

A relative drove my son-in-law's car and left it in front of the church; however, when he parked it he left the keys inside and locked all the doors. Something like this is always fun to film.

In making a wedding movie record, you can write your own ticket on just how much footage you want to expose. It might be well to discuss the plans with the bride or her mother and make an outline of the details to be high-

lighted in the movie. If you want to end up with a four to eight-roll movie (200-400 feet of 8mm, or 400-800 feet of 16mm), you should decide in advance how many feet of film will be allotted to each sequence. This will help you to "budget" your film in advance.

Today most movie makers like to use color film for wedding pictures. This is quite natural, because how else can one record the colorful dresses of the bridesmaids and make effective close-ups of their bouquets? The bride, too, will cherish the close-ups of herself in color; and further, how else can one truly record the "blushing bride?"

After the wedding films are processed, they should be edited and titled. The various scenes should be cut to proper length and arranged in the best sequence.

The titles should be adequate and should contain information on dates, and names of persons and places that might be forgotten in a few years. Remember, the wedding movie may very well become an important part of the family movie library, and will become just as precious as the still pictures of our grandparents and great-grandparents are today.

A wedding film such as we have discussed here should be duplicated so that there will always be more than one copy available. The duplicate print should be stored in a



Make informal shots such as this of the bride and flower girls.

location widely separated from the original, so that in case of fire or flood both films would not be damaged at the same time, and at least one would be salvaged.

Making wedding movies is fun—and remember, there's no finer gift you can give the bride and groom than a motion picture record of their "day of days."

Cameraman — or Gadgeteer?

FRANK E. GUNNELL, APSA

HISTORY repeats itself—even among amateur movie cameramen! In fact, the individual histories of most amateur movie makers are repeated so often that they may be condensed into two brief volumes, the first about the cameraman who takes his hobby for all it is worth, and produces many fine films, and the second about the "gadgeteer" whose hobby takes him for all he's worth, and who produces few films worth looking at.

And what gadgets there are to tempt the amateur movie maker! Gadgets that glisten in the show windows of his favorite camera store, gadgets that make the advertisements so fascinating to read, gadgets that will do this or that, gadgets that cost only a little, and gadgets that cost a lot! In fact, there are gadgets without end. *And why not?* Isn't movie making about as broad a hobby as one can imagine? Doesn't it delve into practically every phase of life on this globe and beyond? Doesn't it have all sorts of possibilities in illusions of time, space, and matter, many of them produced as "special effects" with the help of gadgets? And yet, if we, as movie makers, are to make the most of our avocation we must avoid becoming mere "gadgeteers" instead of cameramen who *use* gadgets for the effects that can be produced with them.

Let's get it straight, this is no diatribe against gadgets.

In fact we're heartily in favor of them *provided* they are used to produce better movies, instead of merely being exhibited by the cameraman as parts of his "collection" of movie making equipment.

For the benefit of the newcomer to amateur movies who may be somewhat bewildered as to what to buy, and for the benefit of the old timer who may need to check up on his use of his equipment, a few suggestions are in order as to the relative importance of various equipment items, and some principles that govern their purchase and use.

The basic equipment for all amateur movie makers consists of a camera, some film, a projector, and a screen. While it is probably too late to suggest it to many movie makers, even this basic movie equipment should be selected only after considerable thought as to what its probable use will be, and how well it will fit that use. Certainly the decision between 8mm and 16mm equipment will depend largely on whether the movie maker expects to show his films to small or large audiences. And, of course, the movie maker who is planning to produce films in some special field, such as nature motion pictures, will need to select his equipment even more carefully.

All of us who started our movie making with just the aforementioned basic equipment, can remember our feel-

ings at the showing of the first reels of film that passed through our cameras. "We were in the movies"—and that was the big thrill regardless of the quality of our work as cameramen or actors. Several rolls of film later we awoke to the fact that something was lacking, for the old thrill was no longer there. Thought on our part, suggestions from a friend or a dealer, or perhaps reading an article like this, and we quickly realized the necessity for certain additional movie equipment. First in importance among amateur movie making *accessories* is film *editing* equipment.

Editing Equipment

Consisting basically of a splicer and rewinds, some sort of film viewer (in some cases the projector will serve), and some reels and cans, film editing equipment offers the first real test of whether one is at heart a cameraman or merely a "gadgeteer." Prize winning films have been produced with the simplest and cheapest editing accessories by cameramen, while many a gadgeteer with a fine collection of elaborate splicers, geared rewinds, magnifying illuminated film viewers, etc., has gotten so wrapped up in the physical techniques of editing that his chief boast is that he can edit 400 feet of film in one hour flat! And how his films show it! Not that fancy equipment isn't nice to have—it is, and rightly used helps the movie maker to get lasting enjoyment out of his hobby through providing fine films for his family and friends.

Editing equipment's chief service to the movie maker is to enable him to complete good pictures by (1) eliminating all bad scenes such as those which are under- or overexposed, light struck, or jumpy; (2) re-arranging the scenes in better order, either according to a definite plan, or at least in better continuity; (3) cutting individual scenes at either end for smooth action or better timing; and (4) splicing in retakes and titles. Too many movie makers think that the chief purpose of editing equipment is to splice together the individual rolls of film returned by the processing laboratories so that the projector can run for a longer time without reloading!

Contrary to what many amateur movie makers believe,

titling devices, of which there is an almost unlimited assortment, do not rank next to editing equipment in importance. But how they do appeal to the gadgeteers! Until a movie maker has mastered his camera, the emphasis must be on producing good pictures. In fact that's where the emphasis belongs all the time! We'll admit that titles help any picture some, and help poor pictures more than they help good ones, but they are secondary in importance. Excellent and economical title services are available to the cameraman while he is mastering the art of making pictures. Then, if he wants to further explore the possibilities of movie making, the production of titles has unlimited possibilities for fun with his camera.

Three filming accessories that rank high on the movie makers list of desirable equipment are (1) a tripod, (2) extra lenses, (3) an exposure meter.

Were it not for the fact that there are means of steady-ing a movie camera without using a tripod, the tripod would be ranked next to the camera itself in importance. As it is, the very possession and use of a tripod seems to effect a great improvement in most movie makers' films, not only by eliminating the unsteadiness of the pictures, but by decreasing the tendency to wave the camera all over the scenery! Usually the cameraman who takes the trouble to set up his camera on a tripod pays much more attention to 'staging' his shots both as to action and composition, and also limits his use of the 'pan' shot to appropriate scenes.

Extra Lenses

The standard one inch lens which is furnished with all 16mm cameras, or the one half inch lens furnished with 8mm cameras, is an excellent all purpose lens, and fine films have been made with these lenses alone. However, the movie makers who do much filming will quickly discover the desirability and need of an additional lens or two.

The experiences of many successful amateurs have shown that the wide angle lens is extremely valuable in working in crowded quarters or close up to the subject, where the standard lens has too limited a field. Equally



Editing equipment offers the first real test as to whether one is a cameraman or "gadgeteer." The author is checking the sequence of his film on the left and using an easy way to clean the film on the right.



important is one of the shorter telephoto lenses. Few amateurs seem to realize the value of these lenses in both family and travel filming, but assume they are only for special purposes such as filming wild life, or perhaps a football game from a grandstand seat.

There is no better way of getting unposed shots of people, be it for a film of your own family, or a travel study of a public market in some foreign port, than to use a telephoto lens. Somehow when a camera is as close as is necessary for a good closeup with a standard lens, even the most cooperative of film subjects become camera conscious and show it. Move the camera away a little, take the same closeup with a short telephoto lens, and your actor relaxes into naturalness.

As for the exposure meter, its use is definitely a matter of film economy, particularly in unusual or difficult situations. But, don't fail to learn how to use the meter according to the manufacturer's directions!

The movie maker who has traveled thus far—both in reading this article, and in his filming,—may be ready for many of the additional accessories which are available, such as titling apparatus, various devices for producing special effects in the camera, cameras with back winding mechanisms, lens extension tubes, and what not. Many of them are desirable and any or all of them may be necessary for certain types of highly specialized camera



The author looking up references in preparation for titling a 16mm film.

work. However, the criterion of "probable use" honestly applied before their purchase still holds good, unless after all, your collective instinct really gives you the greater satisfaction! If it does, go to it!

The Weakest Link

HERBERT A. MACDONOUGH *

REGARDLESS of perfect exposure, fine composition and excellent editing, splicing can be the weakest link in your whole movie making chain and make or break the finest film.

How many times have you had a splice break in your projector just when you were swollen with pride as your audience exclaimed at your movie making prowess. Then on went the lights, everybody blinked and coughed, and you fumbled to reread the projector muttering as you had difficulty in getting the broken end started on the partly full take-up reel.

Or maybe your splices are fine for strength and never pull out in the projector but every time one goes through the gate, the screen image jumps a half frame and then settles back to normal until the next one comes along.

Or maybe your splices are both strong and properly lined up but your audience never fails to see them as they slide by because each one has a nice white line where the emulsion has been removed beyond the splice proper,

or perhaps it's a decolorized area where a generous application of cement was smeared over one or more frames.

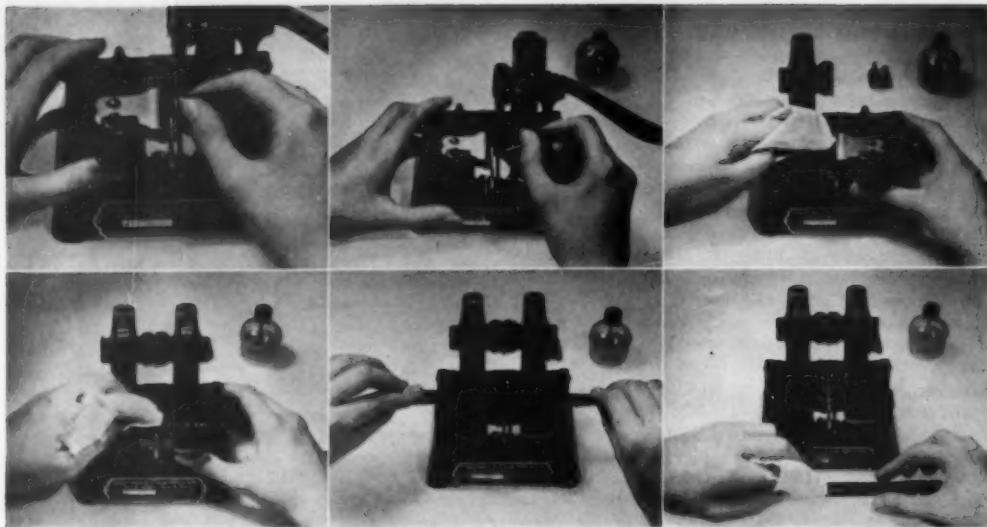
If you would like to improve your splices so they really are professional in appearance and operation, here are the few simple rules to be followed:

(1) Be sure your splicer is in good operating order and that the registering pins which engage the perforations are aligned properly. With pins bent or out of line, an uneven splice results and causes the film to jump as it passes through the projector gate.

(2) Scrape the film deep enough to go through the substratum layer as well as to remove the emulsion layers. Slight moistening of the area to be scraped will aid in the removal of the layers.

(3) Use fresh cement so that you will have the maximum "welding" action between the two pieces of film. All film cements contain certain volatile organic agents that, in time, evaporate off with the result that the cement loses its efficiency.

* Anaco, Binghamton, New York.



(1) (Top left) Emulsion and substratum must be completely removed by scraping. (2) (Top center) Apply cement carefully to the scraped area only. (3) (Top right) Wipe the clamps and other parts of the splicer frequently to prevent build up of cement, emulsion scrapings and the like. (4) (Bottom left) Wipe the front side of the completed splice. (5) (Bottom center) Remove film from the pins using both hands to avoid strain on the newly formed bond. (6) (Bottom right) Wipe the back side of the splice. The finished splice should be virtually invisible—only a fine dark line—never a white one—should be visible.

(4) Apply only a reasonable amount of cement to make the bond and be sure you apply it only to the scraped area of the film. Remember, it isn't how much cement you use that makes a good splice, it's how carefully you apply it that counts.

(5) Don't be afraid to practice on a piece of waste film before you start your splicing sessions, this will afford you the opportunity of checking alignment, scraping action, cement condition, etc. It takes only a few minutes to run through a few practice splices.

(6) Good cement applied to a properly scraped area should form a permanent bond in from 15 to 45 seconds.

(7) Be clean in your operation. Keep the splicer bright and free from accumulated dried cement or emulsion scraping. Wipe the cutting blades and the clamps frequently with a small cloth during a splicing session.

(8) At the end of a splicing session, wipe all areas with the cloth. Should any residues remain, rub with a little fresh cement on your cloth to dissolve them. Then wipe dry. The few minutes spent cleaning up will amply repay you in excellent quality splices.

(9) Lift both ends of the film free from the pins simultaneously after you've opened all clamps, turn the splice over and wipe the back with one smooth stroke using your cotton cloth. Always wipe in a straight line directly across the film.

(10) Once the film is removed from the splicer, wait a few seconds before winding onto your take-up reel. This gives any remaining volatile chemicals a final chance to evaporate. Certain chemicals, especially acetic acid, alter

the dyes in modern color films; thus, a splice carrying some unevaporated cement onto a tightly wound reel may cause a color change for several frames, particularly when the reel is placed in a closed metal can.

(11) Much has been written about the ways of testing splices but the final proof of your splicing ability is to tear a few directly across the film—if the film adjacent to the splice tears instead of the splice itself separating, then you know you have a first rate splice. Actually, a proper splice is stronger than any unspliced area in the same film.

(12) Finally, think back over the many professional movies you've seen at the theatre. How seldom, if ever, were you aware that dozens of splices passed before your eyes during the showings, yet you were not conscious of them. Well you can strive for a similar quality in your home movies by paying close attention to your own splicing habits. Don't let poor splicing be "the weakest link" in your movie making chain!

CONVENTION HIGHLIGHTS

SOUTH OF THE BORDER TO CANADA—on the Windsor, Canada, shore south of Detroit. Scottish Pipers! Bring your appetite. Lots of good food. Entertainment. Don't forget your movie camera. This will be *some* affair! Wednesday, October 10. Come to the Convention early. Transportation furnished.

Good Showmanship When Combining Motion Pictures and Slides

IRA B. CURRENT, APSA

IT WOULD be next to impossible to now standardize the shape and size of screen images for everyone concerned with projecting slides, but there already exists a basis for individual standardization, namely, the size and shape of the 8mm or 16mm projected motion picture image. Very often photographers who show movies are also interested in showing slides, and many camera club or other screen programs will include both.

Very few slide enthusiasts can recall a show in which once the slide projector has been set up, and a slide adjusted on the screen, that other slides did not run off the top and bottom or sides of the screen because they did not cover the same area as the slide used for focussing.

Of course, a group of 24 x 36mm double frame miniature slides all with horizontal aperture, just returned from the processing laboratory, will not present this trouble, because the slides have, in effect, been "standardized" with respect to their apertures; that is, they are "standard" as far as this individual group is concerned.

When new slides from such a group are later selected and mixed with a group containing vertical slides, the group becomes less uniform, for if the first slide, used for adjusting the projector, had a horizontal aperture and just filled the screen, the vertical slides would allow mother's head and feet to fall on the bookshelves behind the screen, and all we see is her middle; which may or may not be very interesting.

If we go further, and mix in some 2x2 slides cut down from 2 1/4 x 2 1/4 pictures made on other occasions, and having a picture aperture measuring about 1 1/2 x 1 1/2, we find that the parts of the picture that may have really made the new composition have fallen off the screen, leaving only an unintelligible part of the picture for our audience to study.

The same sort of thing, even to a worse degree occurs if we are using larger 3 1/4 x 4 slides, for we may have 2 1/4 x 2 1/4 pictures, 2 1/4 x 3 1/4 pictures, full aperture of about 2 3/4 x 3 1/2, or any size in between mounted in these slides, and if one of the intermediate sizes is used to set up the projector, the large sizes fall off the screen, and the small sizes are lost in the center. As a matter of fact, this trouble is not experienced only by amateurs, for professional lecturers are often caught apologizing because the main part of the picture about which they may be talking is off on the back wall somewhere.

The answer to all of these problems is one of personal standardization. This means selecting a size and format of slide aperture, and then sticking to it, regardless of the arguments of the aesthetes who insist that some slides have to be vertical and some horizontal. Since you nearly always want to show your transparencies to an audience, you should sacrifice the few pictures that might deviate from your chosen format such as the vertical slides, in the

interests of good showmanship, and audience comfort and enjoyment. (If you must have vertical slides in your collection, however, the projector should be focussed with a vertical slide in the holder. Then the horizontal slides will always fall on the screen if it is horizontal or square.)

Since slides and movies nearly always go together, the selection of slide opening format should be relatively simple, for you probably will have to show your slides on the same screen, and maybe to the same audience. The proportions of the 16mm frame are very near to 3x4. The 24x36mm "double frame" slide is about 29/32x1-11/32 inches, or somewhat longer format than the 16mm. The relative proportions of these two frames are illustrated in Figure 1. These two proportions are so similar that it would be needless to mask down 24x36mm double frame slides, and these slides and 16mm movies can easily be accommodated on screens with the 3x4 proportion. The projectors should be arranged so that neither the 16mm or 35mm frames, all horizontal, will fall partly off the screen.

When purchasing a slide projector, the thought of using the projector in conjunction with a movie projector should be kept in mind, and the proper focal length lens obtained to just about fill the screen at approximately the same distance as your movie projector will be set up. For example, a lens to project standard 35mm double frame slides, from about the same distance as a 16mm projector with a 2 inch lens, should have a focal length of about 5 inches. The slide projector in this case will have to be moved somewhat closer to the screen to match the movie projector image, but it will be approximately in the same size.

If your combination happens to be 16mm and 3 1/4 x 4 slides, the problem will lend itself readily to solution. If your camera will permit, you could settle on a slide opening format of 2 1/4 x 3, and this will be easy to maintain as shown later on. The picture area can readily be cut down from the popular 2 1/4 x 3 1/4 size, or even larger films, such as 3 1/4 x 4 1/4. Here, a 12 inch lens would be required to put the slide projector at about the same distance from the screen as the 16mm projector. Ideally, the screen intensities of the two projectors should be adjusted by trying different lamps, until there is not too great difference in screen intensity.

In order to mask 3 1/4 x 4 slides down to 2 1/4 x 3, while mounting transparencies, a rectangle of 2 1/4 x 3 inch dimensions may be ruled in ink on a white card, exactly centered in a 3 1/4 x 4 rectangle on the same card (or the card itself may be cut out on the 3 1/4 x 4 lines). Then a cleaned cover glass is laid over this diagram, with its outer edges coinciding with the outer rectangle. Then regular 1/2 inch black binding tape is cut to length to just fit the cover glass dimensions, and are stuck to the glass with the

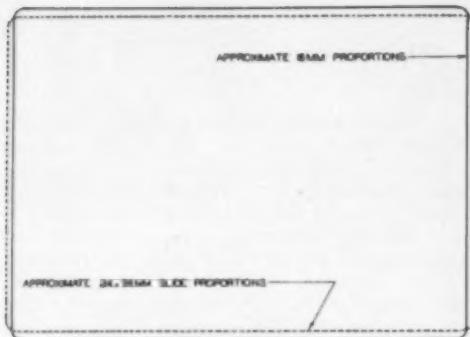


FIGURE 1.

inner edges of the tape corresponding exactly to the two sides and the top of the inner rectangle. This forms three sides of the aperture. The transparency is then carefully centered over the aperture thus formed, using the remaining line of the rectangle as a guide to the fourth side of the aperture. A suitable weight is used to hold down the transparency, and the fourth side of the aperture is enclosed by sticking a piece of the binding tape across the edge of the transparency. This holds the transparency in position, while at the same time completing the aperture, and permitting the transparency freedom to expand and contract to some extent, as the result of variations in humidity, without buckling. The slide is completed by binding a cover glass on top. (A convenient way to do a neat binding job is to stick one edge down, then cut the tape at the corners before sticking the next edge, repeating this procedure all around the slide. This permits the edges of the slide to slide more freely into projector carriers, and with less of a tendency to tear than when the corners are folded down.) With care, it is not necessary to even use the ruled card for layout of the slide, for the $\frac{1}{2}$ " width tape, if the outer edges coincide with the edges of the cover glass, will subtract just $\frac{1}{2}$ inch all around, leaving a $2\frac{1}{4} \times 3$ aperture.

If you are not interested in "standardizing" on the 3×4 screen format, and never intend to combine your slides and movies, you should arrive at some other convenient size and shape, then stick to it. In this way you may assort slides together from several of your collections, if necessary, without fear that parts of the picture will fall off the screen, once the projector is adjusted. If you like a square format, and your picture material lends itself well to this treatment, you might standardize on this shape.

In many instances, amateurs may be required to prepare engineering or scientific charts in the form of lantern slides. ASA Z15.1-1932, available for 50¢ from the American Standards Association, Inc., 70 East Forty-fifth Street, New York 17, New York, includes complete recommendations for preparation of such slides, including size of lines, size and style of lettering, format, etc.

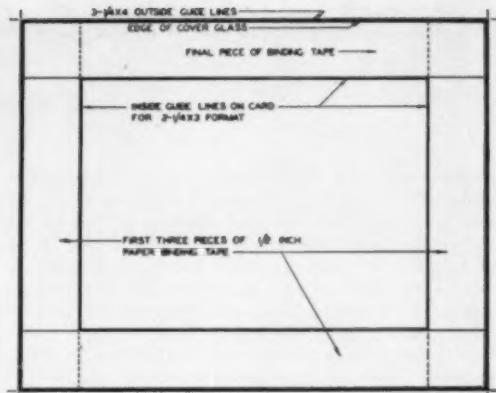


FIGURE 2.

Another document, ASA Z38.7.19-1950, gives American Standard Dimensions for Lantern Slide, including dimensions of the slide itself and tolerances, projected area dimensions, thumb mark position, etc., for 2×2 and $3\frac{1}{4} \times 4$ slide. These standards allow considerable leeway in the maximum dimensions of the projected area, but personal "standardization," or "standardization" within an organization would be more narrow than these in order to provide uniformity, and to prevent the distressing spill overs referred to above. With reference to black and white line slides, black lines on a clear background are generally to be preferred, for some lecture halls cannot be adequately darkened—in fact, with this type of slide it is not necessary to darken the hall at all—and heat from the projector lamp will not be absorbed to buckle the drawing.

If an organization standardizes on a given format of projector aperture for all of its slides, various slides may be assembled to form new groups with the assurance that they will fit on the screen, and if standardized to the movie format, slides and movies can be projected at the same occasion and give the audience the satisfaction of a neater, more showmanlike performance. The rules for good showmanship where slides and movies may be run together are:

1. Standardize on Slide Opening Format:
 - a. Horizontal miniature 24×36 mm in 2×2 slides, and select a 5 inch slide projector lens when the projected area is to match that of a 16mm projector with a 2 inch lens.
 - b. Horizontal $2\frac{1}{4} \times 3$ opening in $3\frac{1}{4} \times 4$ slides, and select a 12 inch slide projector lens when the projected area is to match that of a 16mm projector with a 2 inch lens.
2. Adjust both projectors before the show, and if possible balance the light intensity as nearly as possible.
3. If vertical openings in slides must be included, be sure to focus the slide projector with one of the vertical slides in the carrier. Then the other slides will be sure to be completely on the screen, but they will not conform to the 16mm projected area.

Titling Home Movies

ERNST WILDI *

After a wonderful vacation, you are finally back home, happy about your movies—precious souvenirs of your vacation experiences.

Now, what are you going to do with those reels after you have projected them a few times for your family?

This uncritical audience sees nothing wrong with your films. But, believe me, an untitled movie is an unfinished one. Merely by the addition of a few simple, easy-to-make titles, you can create a movie that any audience will enjoy, and one that you will be justly proud of.

A finished film incorporates four types of titles. These are:

1. Main title
2. Credit title
3. Explanatory title
4. End title.

Even the simplest movie definitely needs two titles—a main title and an end title. You will find that this little addition gives your home movie a much more finished appearance.

Credit titles, well known to all movie goers, generally show a long list of names of all the principals in the production. Your movies should similarly include the name of the cameraman, the actors, and others who have assisted you in making the film.

Explanatory titles are necessary in most silent movies to explain the sequences of action, to record dates, and in serious films to explain where action is missing and to

bridge gaps that often occur between conversation between actors. Regardless of how well your titles are made, they are always an interruption in a smooth flowing action. Therefore, insert explanatory titles only when absolutely necessary. Wherever possible, *try to film your thoughts, rather than express them in words.*

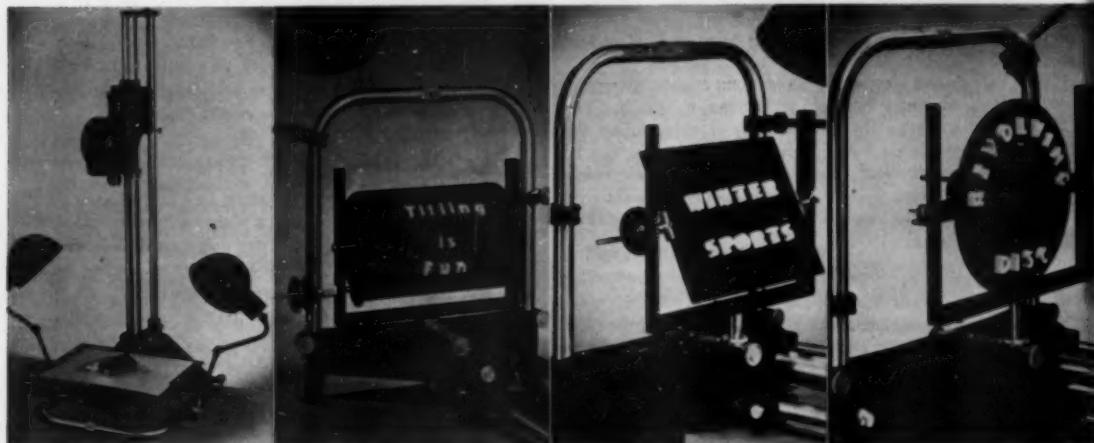
Exciting titles can be made by utilizing road signs, maps, travel literature and books, newspapers, calendars, and clocks. Such "natural" titles are most effective as they fit smoothly into the action of the film.

And keep explanatory titles short; poetry is often used, which is perfectly all right, but choose poetry with care—one or two lines at most, but rarely a complete verse.

Now, don't think that you need expensive equipment for titling work, or even that titling is difficult or time consuming. Simple titles, even for color films, need no more than your own movie camera, two floodlamps, a piece of colored card, a pen, or a pencil. The card should measure about $13\frac{1}{2}'' \times 18''$, and be of a pastel shade, such as green or blue. Do not use white—such a background is too dazzling on the screen. When titling for black and white films, use a dark gray or a black card for the title background with white or yellow letters.

The $13\frac{1}{2}'' \times 18''$ card is large enough to hand print or write your title to a large size so that it is easily readable and well composed when viewed through the finder of your camera. Choose a color for the writing that contrasts well with the background color—for a blue background use white or yellow for the letters, for a green background write in red or black.

* Paillard Prod. Inc., New York City.



The Bolex Filmtitler (left) set up vertically. The drum mounted horizontally gives interesting titling effects. Flip-flaps horizontally or vertically are easily obtained. (Right) The revolving disc with solid letters attached.

Use a simple and short main title, for instance, "Vacation 1950," or "Our Baby," or "Joan's Birthday." Always put the date and year on vacation and family pictures. If you want to put in a little more effort, you can add simple drawings such as a little sailboat on a vacation movie or a candle in a Christmas feature. Mount the finished title card on a wall, but not on wall paper, with a few pieces of scotch tape. If you have a tripod, set the camera on it so that the whole title can be seen through the viewfinder. If you use your camera handheld, then support your elbows on a chair or table because it will enable you to hold the camera more steadily.

There is one little problem that arises here. Few movie camera finders are parallax corrected for close working distances, which means that your camera lens will not include the exact area seen through the viewfinder. However, the discrepancy is not too serious at distances greater than 2 feet. That's why a large titling card (about $13\frac{1}{2}'' \times 18''$) is recommended. But to insure fairly accurate centering, set the camera up so that you have a slightly uneven space on the various sides when viewing through the viewfinder; for instance, if your viewfinder is *above* the taking lens, leave more space on *top*; if the finder is on the *left* side, leave a wider space on the *left side*. Of course, if your camera has a parallax correction down to 2 feet, the titles can be lined up accurately when the lens is focused on the card.

Working with two 500 watt photoflood lamps, place them one on each side, pointing at an angle of about 45° toward the object. Make sure that the reflector rims do not obstruct the field of view, and that the lamps do not shine into your camera lens. If you have no such lamps, you probably will find a spot in your room illuminated by the sun shining through the windows. Having focused the lens for camera-to-wall distance (with a fixed-focus lens, you don't have to bother), set the diaphragm at the following stops for test exposures:

$f/4$ for color film } with two 500 watt photoflood lamps
 $f/5.6$ for Super X } placed $5\frac{1}{2}$ feet distant
 $f/5.6$ for color film }
 $f/11$ for Super X } with sun lighting an interior wall

A title should stay on the screen long enough for everyone in the audience, both old and young, to read it. The best way to judge the length is by slowly reading the title while shooting. Although typewritten titles can be used, remember that your camera must be extremely close to the original copy in order to insure readability on the screen; the centering of small titles must be done with great care.

More Effective Ways

Perhaps a more artistic touch can be given your titles by using background and writing separately. Your photographic dealer sells sets of ready-made letters about $\frac{3}{4}''$ to $1\frac{1}{2}''$ high, priced from \$6.00 to \$12.00. The well-known Mitten's letters, for instance, come in two different types, with pins in the back for fastening to the background, or without if you prefer to mount them with rubber cement. I prefer the latter, as explained later.

Although these letters can easily be painted any color, I suggest that you leave them white because white lettering on a colored background gives the neatest effect. That's also the way the professionals do it in Hollywood.

Your first step, again, is to decide what your title is going to say. Make it short by cutting out unnecessary words; next, select an appropriate background. As the letters are to be simply laid on the background, you can choose almost anything—a photographic enlargement, a piece of patterned paper or cloth, a rug, sand, or sawdust. Plain textured material such as cotton, wool, monk's cloth, or felt makes an effective background. If you prefer a picture or photograph, choose a subject that matches your title, for instance, an airplane or steamboat picture for a travel movie, a picture of a cake with candles for a birthday party, a picture of Bermuda for a honeymoon production. But do not use black and white photographs for backgrounds for color film titles.

There are two ways of bringing the writing and the background together. First, (and this is the less convenient way), cement the letters onto the background, mount the combination on a wall, and shoot the title as previously described. Cementing letters requires time and patience; rubber cement leaves marks on the background, making it useless for other purposes. Because of these disadvantages, I prefer to simply shoot vertically instead of horizontally. Just lay your background on the floor, compose the letters into a title without pins, without cement, and shoot vertically down from about 2 feet above, according to the size of the title. This easy way of making titles has, I believe, been neglected up to now because no well designed stands have been available which would hold movie cameras rock steady during shooting in a vertical position.

The new Bolex Titler (see fig. 1) solves this problem. It is both a camera support and (as you will see later) an instrument that enables any movie amateur to make 1001 different trick shots in an easy and almost foolproof manner. The camera can be set up at any distance up to 26". Letters $\frac{3}{4}''$ to $1''$ high used at this distance give a very pleasing effect. Instead of using two lights, one on each side, it is better with solid letters to sidelight the title with only one lamp, placed on one side, so giving the letters a raised or three-dimensional effect.

Special Titling Effects

Self composing type titles are often seen in professional films. They usually begin with a plain background upon which the first letter appears after one second, followed by the second letter after half or a full second, and so on until the whole title is on the screen. This effect is quite simple to obtain, but you must have a camera which incorporates a single frame device. Set up your camera above the chosen background, (it is essential to shoot vertically) take 16 single frames, then place the first letter on the background in the proper position; take another 8 frames, place the second letter next to the first one; take 8 frames, the third letter, and so on. When all the letters are on the board, take 32 to 48 more frames

to make sure that everybody in the audience has enough time to read it because some people in your audience, I am sure, will be so amused by this effect that they forget to read the title while watching the letters jump into position.

The most important thing in this procedure is that the backgrounds, the letters, and the camera must not be moved the slightest fraction because if it is moved, a jumpy picture will result. A cable release or remote control operation of your camera is a must since smooth release is the only way to be sure of not moving the camera during filming. Of course, of equal importance is a rigid support for the camera, and here again the Bolex Titler has solved the problem.

Using the same method, you can also obtain a title that "writes" itself—an effect which always intrigues an audience. Instead of letters, you now actually write on a background, rigidly mounted on the titler. Shoot a few frames of the background only, then start writing the first letter of the first word, but don't write the whole letter, only about $\frac{1}{4}$. Then take one single frame, continue to write, take one single frame, and so on until the first letter, and finally the whole title is written. Since it is not easy to write evenly with so many interruptions, I suggest that you write the whole title very faintly with a fine pointed soft pencil before shooting. A very faint guide line will not be recorded on the film. To insure the illusion of smooth and even writing, it is necessary to always print the same length of line forming the letter between the shooting of each single frame.

Even more interesting titling effects can be obtained by using the rewind action. In the "tornado" title your audience again sees first only a background; then suddenly all the letters rush in together from left, right, above, and below, seeming to compose themselves to form the title. This is how it is done—this time line up all the letters on the background first. Don't use cement, don't use pins, and you must again shoot vertically. Instead of shooting as usual so that the title is upright when seen through the viewfinder, turn the titling board with the letters around 180° so that the writing is upside down in the viewfinder. Now, shoot at 16 frames per second, allowing enough time for reading. Now, point the nozzle of a hair dryer right over the letters, switch it on with the camera running, and the letters will be filmed flying away in all directions. Make sure that the background remains in place and upside down. Now, stop the camera. When editing your film, you must cut out this title which would otherwise appear upside down and turn it around so that the end is now at the beginning when you splice it into your film in the proper place.

Since 8mm film has perforations on one side only, the film also has to be turned sideways, which means that the emulsion surface is reversed. Your projector will have to be re-focused during the travel of the "tornado" title. If the title is filmed by use of a mirror placed at 45° to the camera lens, it will be possible to splice the film so that the emulsion side will be the same and not require re-focusing.

With a camera such as the Bolex H-8 or H-16 it is not



MOVIE OPPORTUNITIES GALORE! This picture of an old General Motors automobile is but one of many that may be photographed at the PSA Convention in Detroit this October. Special setups will be available for movie makers during the field trip to Greenfield Village—rain or shine. You will have all afternoon to browse around this famous early American Village with local guides to show you the prize-winning spots. You'll want lots of film for the Greenfield Village Field Trip.

necessary to splice and turn around because with this camera it is possible to film backwards. Simply disengage the motor and turn the hand crank backwards after you advanced enough unexposed footage. This method is a great advantage for 8mm work since it eliminates refocusing the projector. The same method of reversed motion is used for a trick whereby a string from a straight line forms itself into a title. You film the title with the string formed to the title and then pull on both sides, slowly forming a straight line.

Shadow effects are effective with any kind of titling letters. Instead of laying the letters directly on the background, use a piece of clear glass as a support. Again, shoot vertically. After you have composed the desired title, place the chosen background (either plain or in the form of a picture) underneath the glass at a distance of 1" to 2". Place one 500 watt photoflood lamp on one side in front of the letters and you will find that the letters throw a nice shadow upon the background. Almost any shadow effect can be obtained by varying the position of the lamps, or the distance between letters and background.

Combining two planes as necessary to obtain these shadow effects requires a more elaborate construction of a titling stand. The Bolex Titler makes it possible to install three or more planes at different distances; it is possible to make 1001 tricks and real professional titles by combining flips, turntables, drums, rolling screen together with foreground and background subjects. Instead of listing all these possibilities, the accompanying illustrations show clearly the effects that can be obtained, effects of which every amateur can be proud to have in his films.

"How To"

NO. 19—EXPOSE FILM PROPERLY

JOHNNY APPLESEED, APSA

"**M**Y BOX CAMERA pictures were always good, but my new f/3.5 job turns out flops!"

"Sure they were, Son, because all you took were snapshots in sunlight. You are now trying out all sorts of things and you need some pointers. If the camera is good, it will make marvelous pictures over a terrific range of light values that your box camera could never touch, but your camera can't think. Several of us plan a trip next week and we'll hit some interesting exposure problems. Would you like to come along?"

So my young friend, Joe, appeared early Saturday morning loaded down with more photo paraphernalia than you ever saw. His new f/3.5 outfit hung around his neck, so did a miniature, exposure meter, a filter case, and he had a bulging gadget bag over his shoulder. Oh yes, and he carried a tripod. I knew about what to expect, but I said nothing.

When the others appeared, someone suggested a shot of the whole party. Joe started to set up his tripod and somebody started snorting impatiently. So I pointed out that the first lesson in exposure technique depends strangely enough on how important the picture is. If you have plenty of time and the picture is more important

than anything else, then maybe the occasion calls for a short time exposure on a tripod, but if you are holding up a party, use some other technique. In this case the light was still not good enough for a hand-held snapshot, so I suggested flash. When I told Joe to set it at f/11, he said, "You mean 11 feet?" I adjusted the camera for him and introduced f/ numbers after we got underway.

These f/ numbers are merely a means of labeling the lens openings of all cameras, large and small, so that they can all use the same number for the same situation. The f/ number is actually the focal length divided by the effective diameter of the lens. The term "one stop" which we toss about so freely is understood to be the interval from one f/ number to another in the series f/4, 5.6, 8, 11, etc. Closing the diaphragm from one such number to the next cuts down the light going into the lens by half. This half business comes in handy because most of the shutter markings are also on a two times basis, for example, 1/25, 1/50, 1/100, 1/200. So you get the same exposure on the film using f/8 at 1/100 second as you do using f/11 at 1/50 second. What I suggested to Joe to simplify things at the moment was to shoot everything at 1/50 unless he had good reason to use some other shutter speed.

As I continued this explanation of the theory of exposure, there was a loud bang from one tire, and the subject of conversation changed abruptly. The sun had risen by then, but we pulled into the shady side of a service station. Somebody suggested a shot of the flat as an interesting incident of the trip, so Joe jumped out all ready to shoot. I had shown him the usual settings for sunlight, namely 1/50 at f/11 which he was going to use. I immediately pointed out that what he was shooting was not in sunlight even though the sun was shining. I suggested he open up to f/5.6. He took the picture and said, "How did you know how to set it?" I told him experience was a pretty good guide for the open shade we were in, but that he could learn to rely on his exposure meter for all situations away from sunlight. He got out the meter and it agreed fairly well with my estimate. When he started moving it upwards a bit, the sky over the service station hit the meter and it began to jump. So I pointed out one of the most important things in using a meter for subjects away from sunlight is to keep the meter down so that the sky cannot affect it.

By now Joe was beginning to get the idea that there are many picture situations away from sunlight, therefore you have to learn something about exposure. We got underway again and stopped just outside of town where there was quite a view from a look-out point. The view was quite bright, and the few people that were there looking at it seemed dark by comparison. Joe was all for going to



This cloudy sky background would result in a high meter reading and consequently lead to under exposure. Such sunlit pictures do not require exposure meters.

the edge of the look-out and shooting the view. I got him back to where the view would be framed by the spectators. He had sense enough to point out the difference in brightness between views and people. Since the view is the important thing, and not the spectators' backs, he set for the view, namely f/16 at 1/50. When the folks turned around he wanted a picture of them since they had now become the principal subject of interest. Joe focused for them and exposed at f/11 at 1/50.

He was shooting black-and-white at the time, but asked about color transparency film. There is an interesting difference in that the black-and-white exposure and indeed that for negative color film depends on the significant shadows. Transparency film must be exposed according to the highlights. Both the distant view and the spectators had parts in sunlight. Therefore, the exposure setting for transparency film would be the same for both.

We hiked up a glen where there was a beautiful falls. At that time of morning only the crest of the falls was in sunlight. I had been talking about adding flash to shadow regions of daylight subjects, so Joe asked about flash here. However, the falls was too far away for the flash to do any good. It was one of those situations that you could not guess at with certainty. Joe set up a tripod, aimed his meter so it was not affected by the sunlit spot. "What if I had forgotten my meter?" The best answer in a trick situation like this where you really want the picture is to make three negatives each exposed four times as much as the last. Put the middle one at your best guess for the situation. If color film is being used, two times intervals are more appropriate. Anyway, such a



Meters are practically indispensable for studio photography where a wide variety of lighting is used.

contrasty subject won't make a good color transparency and it will even be tough to print in black-and-white. It

(Turn to page 520)



DRIFT CREST

Lawrence M. Spaven

From *The Fifth Great Falls Salom of Photography*

Presenting

the

Kodak Signet^{*} 35

*SIGNET: the seal of authority; the power-sign mark.

CAN a top-flight precision miniature camera be built in the \$100 price range—with an unexcelled Kodak Ektar Lens and all the basic refinements and conveniences that critical workers demand? Yes! Kodak has achieved it in this 18-ounce jewel, the new Kodak Signet 35. This camera's performance, the unique "extra something" it puts into pictures, will soon be the talk of every camera club.

THE Kodak Signet 35 is a compact, solidly built, handsomely styled 35mm. miniature, with a 44mm., f/3.5, Lumenized, 4-element Kodak Ektar Lens, fitted to a new high-efficiency Kodak Synchro 300 Shutter, 1/25 to 1/300 and "B." Lens and shutter travel on a velvet-smooth focusing helix and a ball-bearing, lifetime-lubricated flange. A superimposed-image range finder of superior design, combined with an enclosed optical eye-level view finder, couples accurately to the lens through the full focusing range, 2 feet to infinity. Viewing and ranging are through a single eyepiece. Built-in flash synchronization is reliable for both color and monochrome films. The camera shell is a sturdy aluminum-alloy die casting, for enduring rigidity and exact alignment. Exterior finish is satin aluminum and scuff-resistant black Kodadur. The camera, with lens retracted, measures only $4\frac{1}{2} \times 3\frac{1}{8} \times 2\frac{1}{2}$ inches. Its weight, 18 ounces.

THE LENS "Ektar" is a quality designation reserved by Kodak for its finest lenses—top-level professional, movie, projection, and microfilming lenses. To win the "Ektar" seal, a lens must pass exacting tests for every known optical aberration, and must rank as unexcelled in its intended field. The 4-element, 44mm. Ektar lens of

the Kodak Signet 35 meets every Ektar requirement; you will not find a better lens on any miniature camera, at any price.

So superb a lens deserves a camera which is absolutely rigid and made to the closest tolerances. In the Kodak Signet 35, each detail of shell, shutter, mount, range finder, and view finder is designed to preserve the full optical performance of the lens—through precise alignment, exact machining, and minimum play at every point in the optical system.

THE SHUTTER The Kodak Synchro 300 is no ordinary shutter. It achieves the steep opening and closing curves of a 5-blade shutter—with only two rugged blades! Swift opening means superior light transmission—just as the engineering simplicity means extra sturdiness, extra reliability, fewer parts to vary or get out of order. At any shutter setting, the Synchro 300 is wide open in $2\frac{1}{2}$ milliseconds—and its closing curve is just as steep!

Triggering is indirect—so the rate at which you release the shutter has no effect on performance. The shutter release sim-



Synchro 300 shutter is wide open in $2\frac{1}{2}$ milliseconds—closes with same speed! Curve at left shows its efficiency.

ply trips a spring-loaded lever, which actuates the shutter and flash-timing mechanism. Flash setting is automatic—no lever to set after each shot. Flash contact is a "wipe" contact, self-cleaning, accurately timed for all Class M (No. 5 and 25 and some larger) lamps. Shutter settings are 1/25, 1/50, 1/100, 1/300, and "B," all visible at a downward glance without turning or tilting the camera.

The shutter mechanism is typical of Signet 35 construction. All parts are sturdy, for long reliable service. The heavy-gauge case is drawn and turned, and the lens cell, a separately turned unit, is permanently staked in by swaging around its entire circumference. Critical surfaces of case and cell are then brought to exact relationship in a final precision turning, to assure perfect parallelism and centering. An extra-heavy mechanism plate carries all the moving parts.

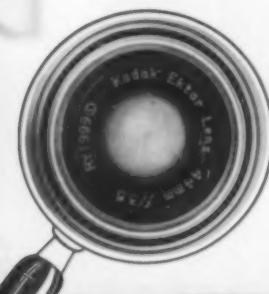
FOCUSING MOUNT Lens and shutter are mounted on a machined tube which bears the focusing helix. Lateral play between this tube and the corresponding helix inside the focusing ring is held to less than .001 inch; end play to less than .0015 inch. The focusing ring bears on fifty ball bearings, in a race $1\frac{1}{2}$ inches in diameter. This firm, 50-point support across a wide base assures velvet-smooth focusing even with fore-and-aft tolerance adjusted virtually to zero. Restriction of play in the mount also assures exact co-ordination between lens and range finder. The ball bearing lens mount is lifetime-lubricated with a film of special all-temperature lube.

—Note these significant details of the new Kodak Signet 35—

Lens is a 44mm. Kodak Ektar—the word that spells supreme quality. Focal length matches the film diagonal—is exactly right for all-around use. Settings, f/3.5 to f/22. Lumenized, for maximum transmission and color purity.

Shutter mechanism is rugged, built for lasting reliability. No release variation. Perfect flash timing for the popular No. 5 and 25 lamps at all speeds—1/25 to 1/300. "B" setting for time exposures. Sturdy 2-blade design has exceptional efficiency.

Precision focusing helix on lens tube is machined for .001-inch or less lateral play—the minimum for smooth focusing action. At right, all camera scales are visible at downward glance—aperture, focus, field depth, shutter speed, film counter.



Camera

with Kodak

Ektar

f/3.5 Lens



THE SHELL For lightness plus rigidity, tough die-cast aluminum alloy is used for the Signet 35 shell. This shell is a precision casting, very trim and cleanly designed, with most of the bearing and mechanism supports integral. Typical Signet tolerances are maintained in the finishing; for example, four small bosses, flanking the film aperture at the back of the camera, are so finished as to hold the pressure plate away from the film rails by just the thickness of a film. This means that in winding, the film glides through, instead of dragging through under full pressure.

RANGE FINDER Few miniature cameras allow generous top space for a rugged, reliable range finder. In the Signet 35, the large top housing is almost wholly occupied by a combined range-and-view finder, sturdy built, with all bearing slack eliminated by spring-loaded V-block bearings. These bearings, plus solid construction, eliminate the usual range-finder variations. The entire mechanism is mounted directly on the solid camera casting. Ranging is unusually easy, with a large clear triangle

centered in a full-frame field; and is precise from 2 feet to infinity.

OTHER DETAILS The film-winding mechanism is compact, rugged, jam-proof, and very smooth...so smooth you can advance the film with a flick of your thumb on the winding knob. Film counter, on top of camera, reads from 36 down to 0—indicating how much film remains. Winding knobs are large, deeply fluted, easy to handle even with gloves on. Shutter release, cocking lever, and focusing knob are at your finger tips even when the camera is held in a firm two-hand grip. All scales—shutter speed, focusing, aperture, depth of field—are visible at a glance from above. Red dots indicate "average" settings for monochrome and color. On the back of the camera is a quick-action exposure computer and film indicator.

Double-exposure prevention is automatic; but a flick of an inconspicuous lever permits you to make double or multiple exposures at will. Regular Kodak Flashoider attaches at standard tripod socket on cam-

era base. Camera back removes for easy loading and cleaning. Bottom plate is resilient black Tenite, specially selected for its resistance to the scuff and bumps a camera base sometimes suffers. Exterior metal surfaces are finished; the handsome black grained Kodadur covering is tougher and more scuff-resistant than any leather. All Series V Kodak Combination Lens Attachments, with No. 22 Screw-on Adapter Ring or 28½mm. Slip-on Adapter Ring, fit the lens. Neck strap comes with the camera; a handsome tan leather field available.

Price of the Kodak Signet 35 Camera is \$95, including Federal Tax. See it at your Kodak dealer's.

*Price subject to change without notice.

EASTMAN KODAK COMPANY, Rochester 4, N. Y.

Bull bearing lens mount supports lens at 50 points in a 1½-inch circle, keeps perfect parallelism at any setting, is velvet-smooth in action at all seasonal temperatures. Engineers claim it's the sweetest, smoothest mount ever made.

Range-finder mechanism is rugged, with all parts generously dimensioned. Spring-loaded V-block bearings eliminate the tiny bearing variations that cause most range-finder errors. Ranging and viewing are combined in one eye-piece—a large clear triangle in the full-picture field.

Film advance mechanism is smooth, jam-proof, fits compactly under film aperture. Film can be advanced with a flick of the thumb (see right). Exposure count and double-exposure prevention are automatic—but deliberate double exposures can be made at the touch of a lever.



Kodak

will take dodging (printing in and holding back) and other tricks.

Above the falls we came upon a little lake with the sun forming a very striking sun track. Joe remarked, "Gosh, the meter says exposure at f/45 for 1/100." This, of course, would give the sun track but nothing else. "Put the meter away now, Joe, we'll be in sunlight and you won't need it again until we get more subjects out of sunlight." He did, however, try it again on some blossoms against the sky. The sky was a bit hazy, and again the meter read high.

Says Joe, "Well, what do you do for sunlight stuff?" I told him if he wanted a simple answer, just to read the sheet he usually throws away with the wrappings around the film. A more convenient answer is in one of the little pocket computers. The latest gadget put out is several of these computers and a lot of other picture taking stuff all in one little booklet called the Master Photoguide, and Joe finally caught me sneaking a look at this.

We had a picnic lunch in a rather beautiful spot with some nice back lighted effects, and Joe asked about this one. I showed him for black-and-white that he needn't open up at all if he was after the lighting effects. If, however, he wanted detail in the shadow side of the picnic party he could open up the lens one stop. By now he was becoming quite conscious of good picture taking routine and I suggested that he think *FAST*—Focus, Aperture, Shutter, Time.

We had a date that evening with a camera club where they were having a "shoot the model night." There were two lighting setups, one to show how a very simple lighting could be done and the other a more ambitious professional job. The simple setup was a couple of R2 lamps, one main or modeling light, another near the camera for use as a fill-in. I explained to Joe that this setup could be used just about any place without a meter since it was described in tables and guides, but that a meter should be used for the other. Of course, the boys had already used a meter and were giving the information out to all those who were shooting.

The camera club meeting was in the Municipal Museum Building. Joe was interested in some of the Indian displays and asked about the possibility of some pictures. We obtained permission which is, of course, the first thing to do. Joe wanted some shots of individual exhibits from a camera angle that would be hard to reach with his tripod. Flash was easy here, although he had to be careful to avoid reflections from the glass show cases. Joe asked about lens opening so I told him about flash guide numbers. You just remember the guide number for the film you are using, the lamp, and the shutter speed. Suppose you were using a No. 5 or 25 lamp for Plus-X at 1/50 second, the guide number would be 110. Divide this number (if you are smart at mental arithmetic) by the distance in feet and you will have an f/ number.

The Indian Hall was a large one and Joe said "What gives, flash?" I said not for the whole hall. It would take umpteen dozen lamps strategically placed and quite a while to set it up. The lighting "as is" is very pleasing, let's use it. So he set up his tripod and tied the leg tips



with a triangle of string to prevent them skidding on the slippery floor. The meter which he had did not read down to the level of room lighting. It was meant for outdoors and for work with photographic lamps. I happened to have one in which the incident light reading is made with the cell open and not covered by any diffusing element. This type of meter is quite useful for normal room lighting. I said room lighting for this sort of thing is generally around 10 foot-candles. I'll predict settings at f/11 for 10 seconds. We checked with the meter, and either I was close to right or else the meter was. It's a funny thing, one of the best museum pictures I took was with a box camera on a tripod.

After our day of practice on determining proper exposure, Joe was most appreciative and said that information like this is exactly what he needed. I reminded him to *THINK FAST* about Focus, Aperture, Shutter and Time before each exposure. Is this the kind of help you want? Why not drop me a line at PSA Headquarters, 2005 Walnut Street, Philadelphia 3, Pennsylvania? Best comments will be printed in PSA JOURNAL as space permits.

Next Month: How To Get The Most Out of PSA Membership.

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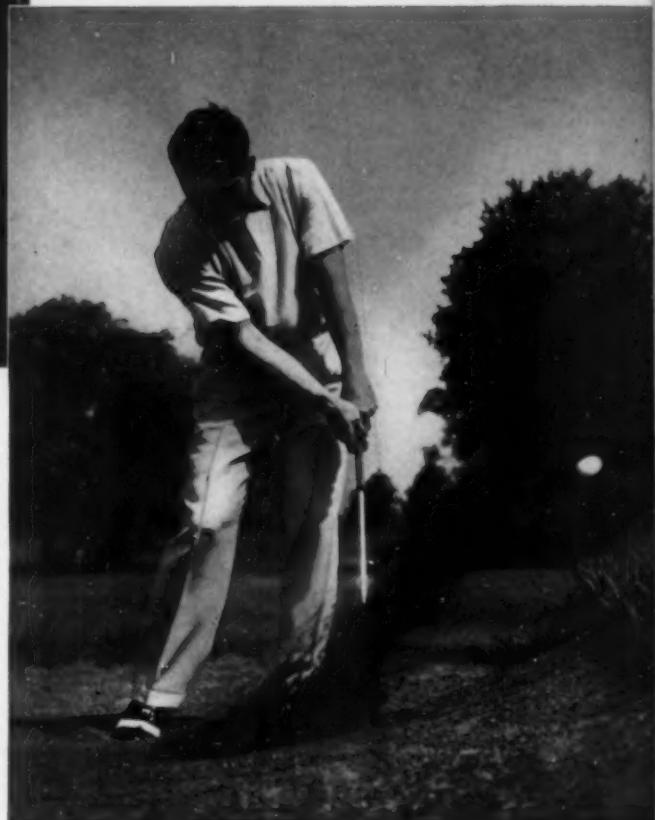
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